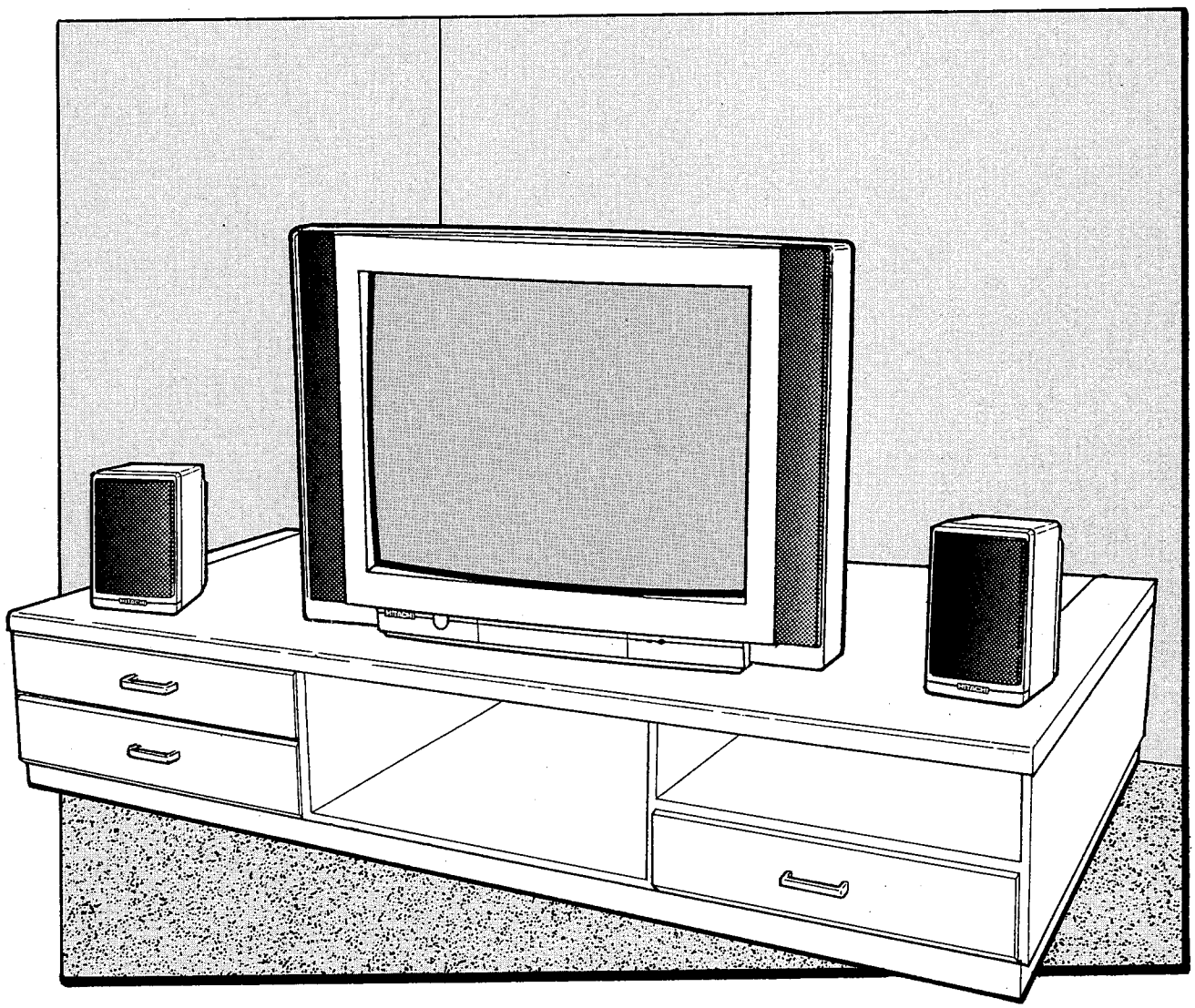
HITACHI

CINEMA SOUND

DOLBY SURROUND
PRO • LOGIC

OPERATING GUIDE FOR MODELS C2574TN C2874TN



beautifully sculptured sound & vision

Contents

INTRODUCTION
Before operating your television ..... Page 3
Safety information ..... Page 3

MAIN FEATURES ..... Page 4

T.V. INSTALLATION
Handset Battery insertion ..... Page 4
Basic connections ..... Page 5

CONTROLS AND CONNECTIONS OF T.V.
Front sockets ..... Page 6
Rear sockets ..... Page 6
Switching ON ..... Page 6

FUNCTIONS OF REMOTE CONTROL HANDSET AT A GLANCE ..... Page 7-8

TUNING IN YOUR T.V.
"EASITUNE" method ..... Page 9
Search tuning (Conventional method) ..... Page 10

PICTURE AND BASIC SOUND SETTINGS ..... Pages 11 - 12
Headphone settings ..... Page 13

SOUND PROCESSING EFFECTS ..... Pages 14 - 15

ALTERNATIVE SPEAKER SET-UPS ..... Page 16

CONNECTING EXTERNAL VIDEO/AUDIO EQUIPMENT
Front of T.V. ..... Page 17
Rear of T.V. ..... Page 18 - 19
S-VHS video recorders and computers ..... Page 20
Satellite connection ..... Page 20

TELETEXT OPERATION AND FASTEXT OPERATION ..... Pages 21 - 24

ADDITIONAL FEATURES

PROGRAMME NAME ..... Page 25 -26

TIMER OPERATIONS
ON Timer ..... Page 27
OFF Timer ..... Page 28
Combined ON and OFF timer ..... Page 29 - 30

DO'S AND DONT'S ..... Page 31

BATTERY GUIDELINES ..... Page 32

PROBLEM GUIDE ..... Page 33

SPECIFICATIONS ..... Page 34

Introduction and Mains Plug Notes

BEFORE OPERATING YOUR TELEVISION

Mains Supply:
This television is designed to operate on 240V AC 50Hz only. Do not operate on DC power supplies or other voltages. Before connecting this television to the mains, please read the following instructions carefully.

The mains lead on this receiver may already be fitted with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS 1362 fuse must be used of the same rating, marked thus or .

If the fuse cover is detachable, always replace the cover after replacing the fuse.

SAFETY INFORMATION

NEVER use the plug with the cover omitted.

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home, or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead, or consult your dealer.

If there is no alternative to cutting off the mains plug, ensure that you dispose of it immediately, having first removed the fuse, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If the receiver is not supplied fitted with a mains plug, then follow the instructions given below.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code: BLUE LEAD....NEUTRAL
BROWN LEAD....LIVE.

As the colours of the wires in the mains lead of this apparatus may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:- The BLUE coloured lead must be connected to the terminal marked with the letter N or coloured BLACK. The BROWN coloured lead must be connected to the terminal marked with the letter L or coloured RED.

On no account connect either of these leads to the terminal marked E or ⏚ or coloured GREEN.

The appliance must be protected by a 5 Amp fuse in the plug or adaptor, or at the distribution board.

IF IN DOUBT - CONSULT A QUALIFIED ELECTRICIAN

Main Features

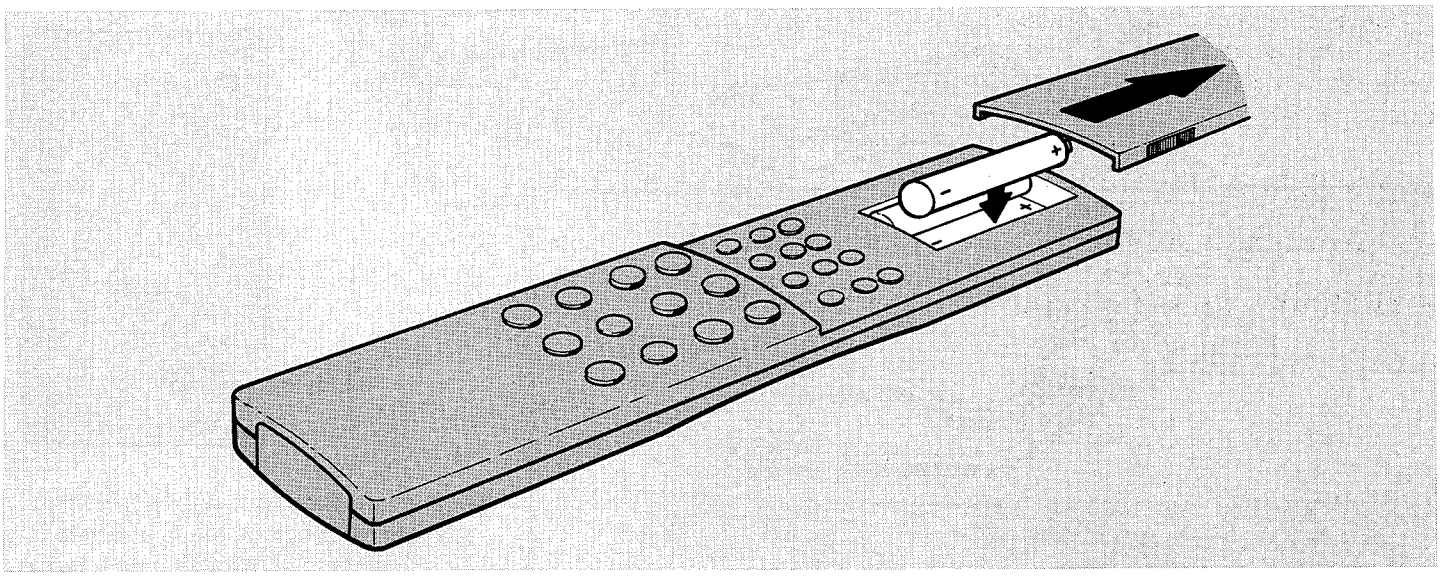
* Dolby Pro Logic Surround
* NICAM digital stereo
* Front/Rear surround speakers
* Menu driven colour coded remote control
* Fastext for easy access to teletext
* Twin scart Sockets for direct connection of external equipment
* "EASITUNE" system
* Front mounted Audio/Video phono inputs, for use with camcorders etc.
* Colour co-ordinated ON-SCREEN display menus for teletext and customer control functions
* ON/OFF Timer
* High quality picture tube

NOTE: Dolby Pro Logic Surround is the domestic version of the mighty cinema Dolby stereo, and allows you to enjoy full cinematic sound quality when watching films produced in Dolby Surround. The external left and right front speakers produce a high-fidelity stereo sound image. The surround speakers at the rear, reinforce the stereo image, allow front to rear sound movement (such as overhead aircraft effects) and immerse the viewer in ambience and special effects. In addition to this the Pro Logic circuitry creates a centre channel, reproduced by the television's internal speaker system. The function of the centre channel is specifically to anchor the dialogue and central sounds to the screen so that voices do not become disembodied or lost in the sound effects.

Most major films released since 1976 and many T.V. programmes are produced in Dolby Pro Logic Surround. You can receive Dolby Surround - encoded programmes and films via NICAM T.V. broadcasts, satellite transmissions, and video recorders. Your VCR and satellite equipment will need to be stereo, and must be connected via the scart socket. (Please refer to page 18).

T.V. Installation

Inserting batteries into remote control



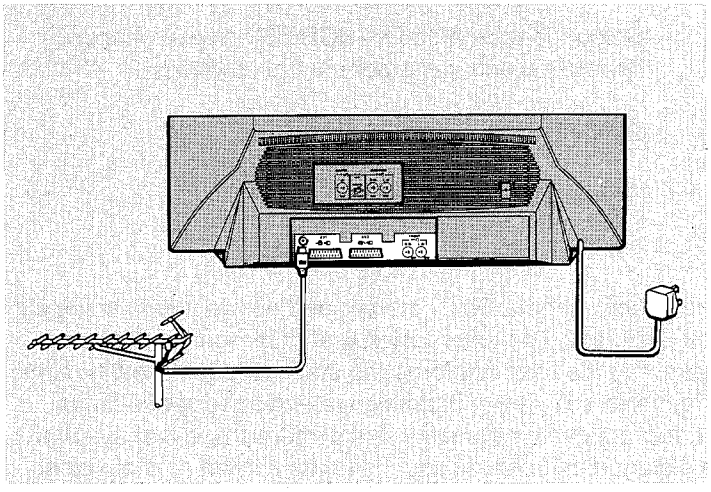
Completely remove battery cover from handset by pulling in direction of arrow, then insert batteries supplied.

Ensure the ⊕ and ⊖ polarities match those indicated on handset. Replace cover.

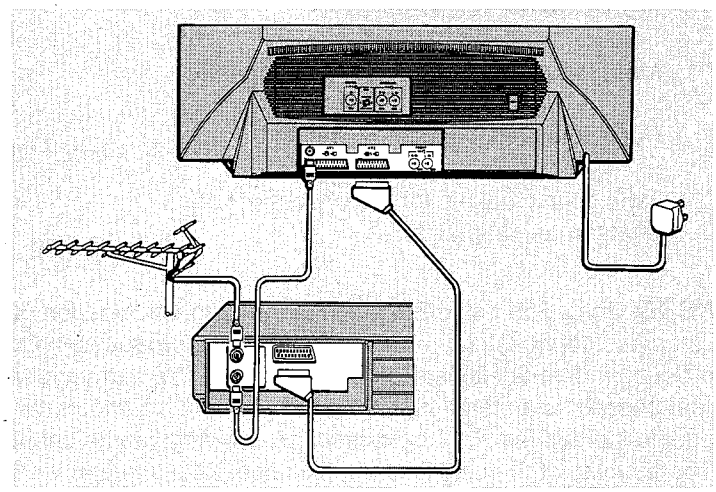
T.V. Installation

AERIAL CONNECTION

Method 1 Direct aerial connection

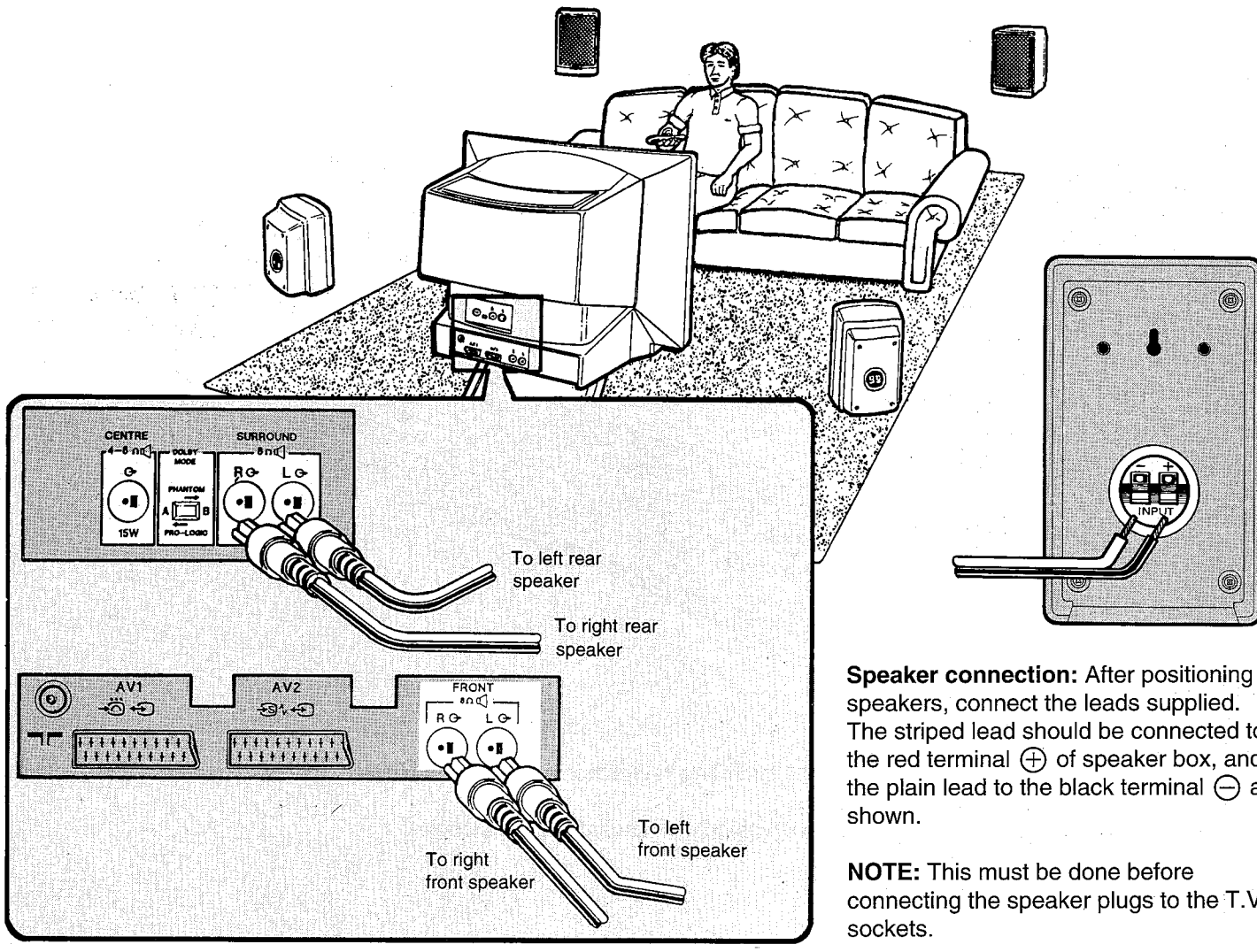


Method 2 Aerial connected via VCR



SPEAKERS

To obtain the full benefit from your Dolby Pro Logic Surround T.V., you should position speakers (where supplied) as shown. If this is not possible, do not worry, as the circuitry firmly anchors the dialogue to the screen, and you can balance the external speakers accordingly (described later). The televisions internal speakers supply the centre channel created by the Dolby Pro Logic Surround system.

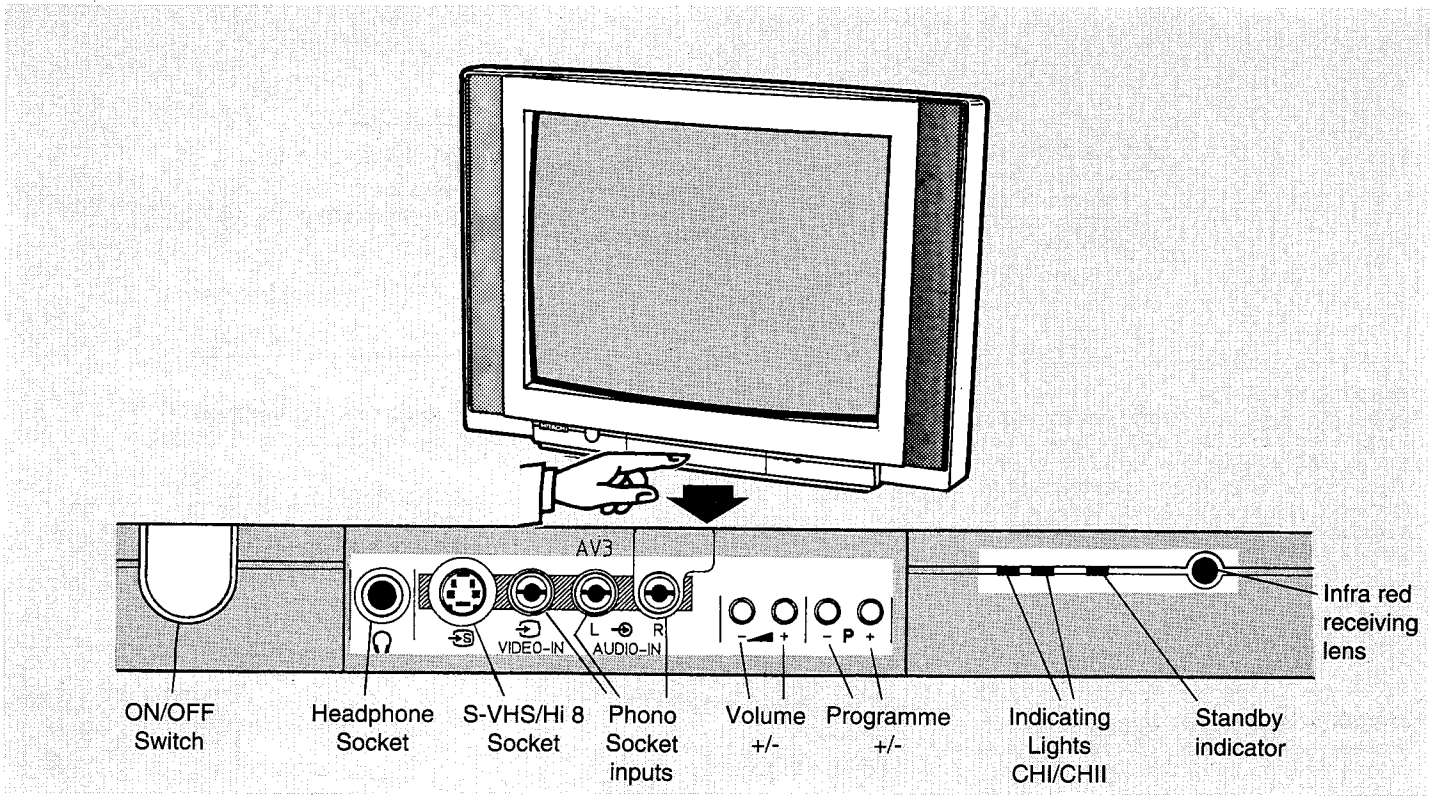


Speaker connection: After positioning speakers, connect the leads supplied. The striped lead should be connected to the red terminal ⊕ of speaker box, and the plain lead to the black terminal ⊖ as shown.

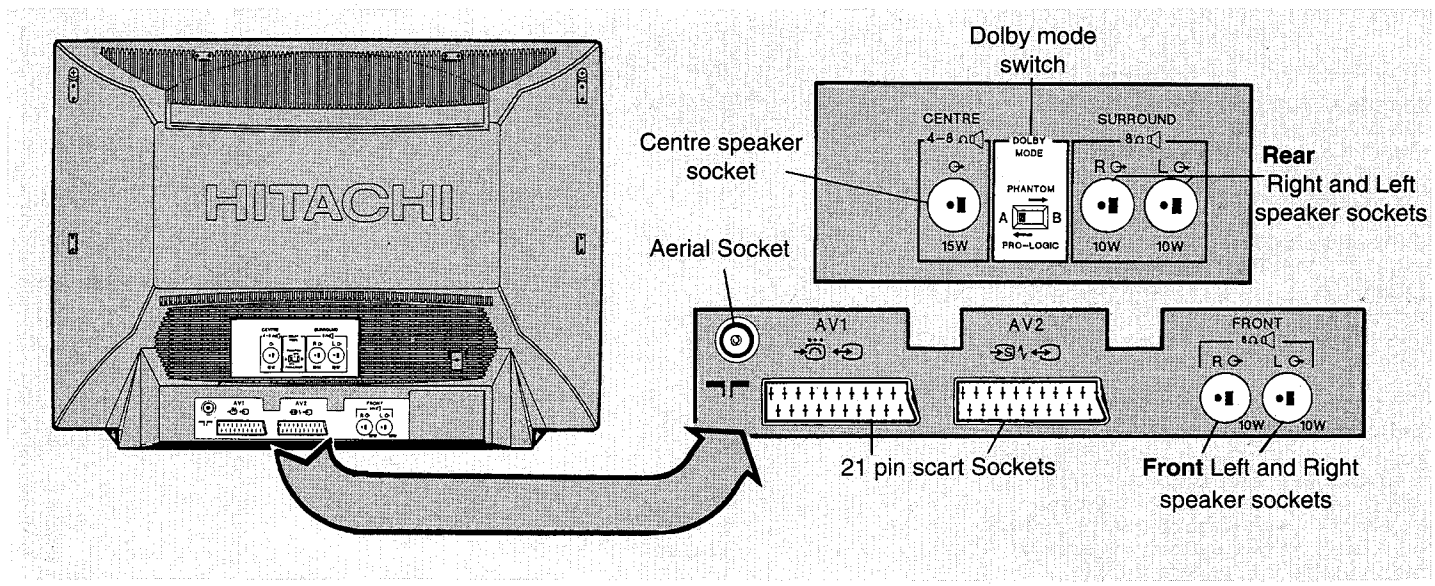
NOTE: This must be done before connecting the speaker plugs to the T.V. sockets.

Controls and Connections of T.V.

FRONT



REAR



SWITCHING ON

Before switching on, ensure that the mains socket is in the "ON" position. Turn on the television by pushing the ON/OFF switch to engage. To switch off, push ON/OFF once again.

Note: If the television fails to come on, but the red indicating light,on the front of T.V. is lit, then it is probably in the standby mode. Should this happen, aim the remote control handset at the T.V., and press the button marked ⏻I .

N.B. Normal operation can also be resumed from standby mode, by pressing the P + or - buttons on the front controls of this T.V.

Functions of Remote Control Handset at a Glance

GUIDE The two rows of 5 coloured buttons on this handset have dual functions. When using the on-screen menus, pressing these buttons will select the corresponding coloured topic in the menu. In normal T.V. mode, the function of each button is signified by the symbol adjacent to it.

RECALL BUTTON ⊕
When pressed, the programme number, programme name, and other relevant information will be displayed on screen briefly.

SOUND EFFECTS BUTTON ♪
Press to display DOLBY and effects menu. The balance of each speaker, and the various effects can be selected from this menu.

STANDBY BUTTON ⏻
Switches picture and sound off Pressing this button will put the T.V. into or out of standby mode. This is useful should you require to switch off the picture and sound temporarily . Whilst in standby, the T.V. has a very low power consumption. However, the T.V. should be switched off using the ON/OFF switch if it is to be left for long periods.

TIME BUTTON ◴
Press to display present time on screen briefly.

PROG BUTTONS
Each press will increase or decrease programme number by 1.

EXTERNAL AUDIO/VIDEO BUTTON ⊖
Press this button to select the external inputs menu. From this menu, you can choose to input signals from a VCR etc. via one of the scart sockets at the rear of T.V., or the phono sockets at the front.

GUIDE Should this mode be entered by mistake, press button ▢ to return to normal T.V. operation

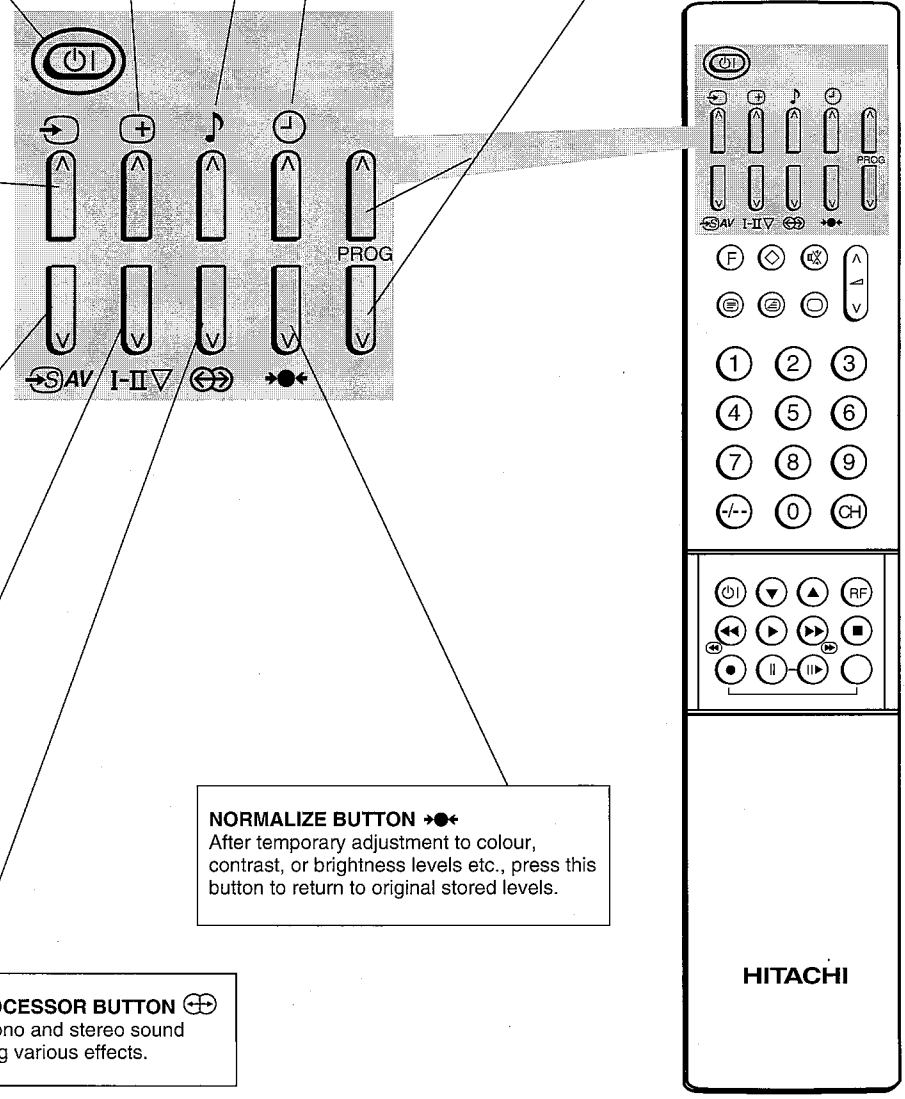
EXTERNAL AUDIO/VIDEO BUTTON ⊖AV (S-VHS/RGB INPUTS)
Press this button to select another external inputs menu. From this menu, you can choose to input RGB signals i.e. computers, via AV1 scart socket, or S-VHS signals via the AV2 scart socket, or front S-VHS/phono sockets.

GUIDE Should this mode be entered by mistake, press button ▢ to return to normal T.V. operation

STEREO/MONO BUTTON I-II-▽
In areas receiving NICAM stereo, this button simply switches between mono (indicated on screen by ▽ symbol) and stereo (indicated on screen by NICAM). If a dual language broadcast is available in the future, this button will sequentially switch between language **I**, language **II**, mono (▽), then return to language **I**.

NORMALIZE BUTTON →●←
After temporary adjustment to colour, contrast, or brightness levels etc., press this button to return to original stored levels.

SOUND EFFECTS PROCESSOR BUTTON ⊕⊕
This is for enhancing mono and stereo sound broadcasts, thus creating various effects.



Functions of Remote Control Handset at a Glance

T.V. BUTTON ▢
Returns you to normal T.V. operation from all on-screen menus and teletext modes.

MUTE BUTTON
Turns the sound on and off alternately.

VOLUME BUTTONS
Increases or decreases the volume level.

STORE BUTTON ◇
Press to store the settings of relevant functions selected from the on-screen menus.

FUNCTION BUTTON Ⓕ
Displays the main menu on the T.V. screen. From this further menus can be selected.

GUIDE
If you should enter a menu you do not desire,press button ▢ to return to normal T.V. operation

TELETEXT BUTTON
Press to enter teletext mode.

MIX BUTTON
Superimposes the teletext information onto the T.V. picture.

BUTTONS 0 - 9
Use to select programme numbers, channel numbers, teletext pages etc.

TENS AND UNITS BUTTON -/--
Press to display – or – – on T.V. screen. When single dash is displayed, programme numbers 1 - 9 can be entered using corresponding handset buttons. When double dash is displayed, programme numbers from 10 - 59 can be entered.

CHANNEL SELECTION BUTTON CH

GUIDE
Press to obtain the direct tuning displays. Mainly intended for engineers. If you should enter this display by mistake, press button ▢ to exit.

UP/DOWN BUTTONS ▲▼
Press to increase or decrease programme number in VCR display.

RF BUTTON
This button only applies to UK VCRs with two scart sockets. Refer to the TV/VTR feature in your VCR operating guide.

STANDBY BUTTON ⏻I
Turns VCR ON and OFF alternately.

PLAY BUTTON ▶
Press to begin playing VCR cassette.

REWIND BUTTON ◀◀
Press to rewind VCR cassette.

RECORD BUTTONS ● ○
Press simultaneously to begin recording.

VCR BUTTONS
Slide down the cover at the bottom of handset to gain access to these buttons. Only Hitachi VCRs with the ⓁⓄ symbol can be controlled by these buttons.

STOP BUTTON ■
Press to halt cassette play mode etc.

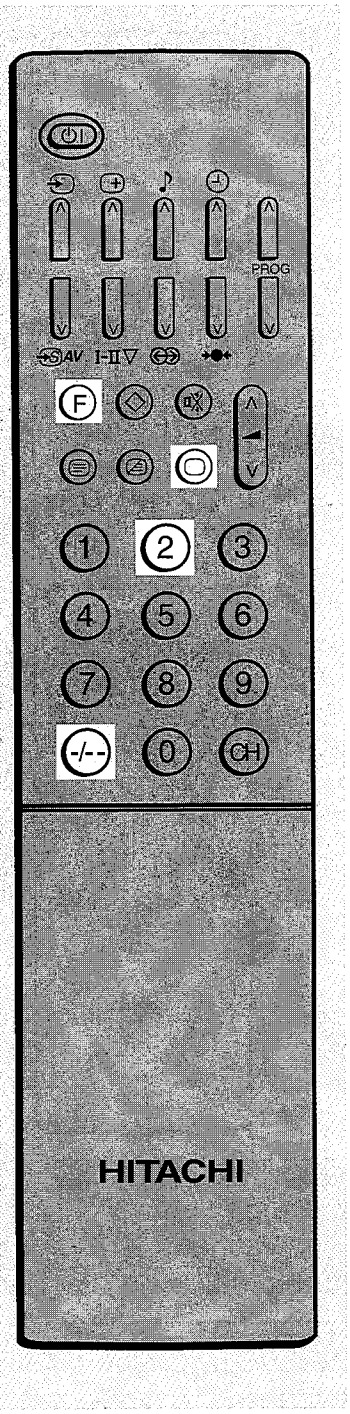
FAST FORWARD ▶▶
Press to wind cassette forward to desired position.

PAUSE BUTTON II
Press to stop cassette PLAY or RECORD modes temporarily. Press once more to resume operation.

FRAME ADVANCE BUTTON II▶
After operating PAUSE button, press this button to advance one frame at a time. (Providing your VCR has this feature).

Tuning in your T.V. ("EASITUNE" Method)

EASITUNE The first time you switch this T.V. on, the "EASITUNE" menu shown will appear on the screen. Once you complete "EASITUNE", it will not appear again (unless reselected).



GUIDE Should the "EASITUNE" menu not appear, or if you wish to recall it to the screen, proceed as follows:-

i. Press Ⓕ button on handset to obtain basic menu.
ii. Press one of the yellow handset buttons.
iii. Press a red coloured button. The "EASITUNE" menu will then appear on screen.

1. As instructed, ensure aerial is connected, then press the Ⓕ button on handset. The T.V. will now search for the broadcasts available in your area.

   Once a broadcast is found the on-screen display will change as shown.
   BBC1, BBC2, or ITV etc., appears at the top of the screen after a few moments.
   If this programme identification does not appear, it is probably due to poor teletext reception. In this case consult your T.V. magazine or newspaper to identify the broadcast.

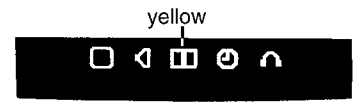
2. Press a button from 1 – 9 on the handset to store this broadcast on the programme number of your choice.We recommend that BBC1 be stored on programme number 1, BBC2 on programme number 2, and ITV on programme number 3 etc.

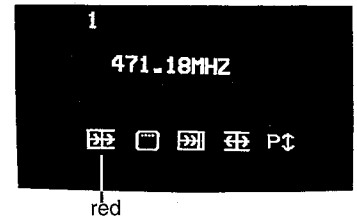
   Therefore, if BBC2 happens to be the first broadcast found, press button 2 on handset. BBC2 is then stored on programme number 2. This is confirmed on-screen.

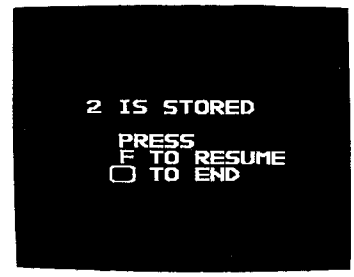
3. Press Ⓕ button to resume the "EASITUNE" procedure, until all the broadcasts in your area have been stored on the programme numbers you desire.

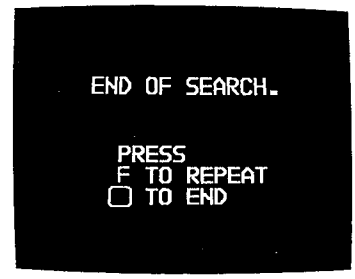
4. When all the available broadcasts have been found, the on-screen display will change as shown.

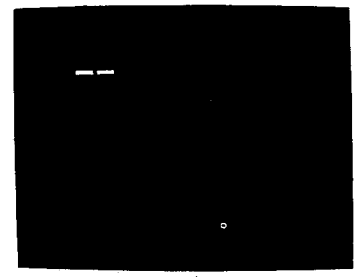
5. If you wish to start "EASITUNE" again, then press Ⓕ button to repeat. If not, press ▢ button to end. Display disappears.









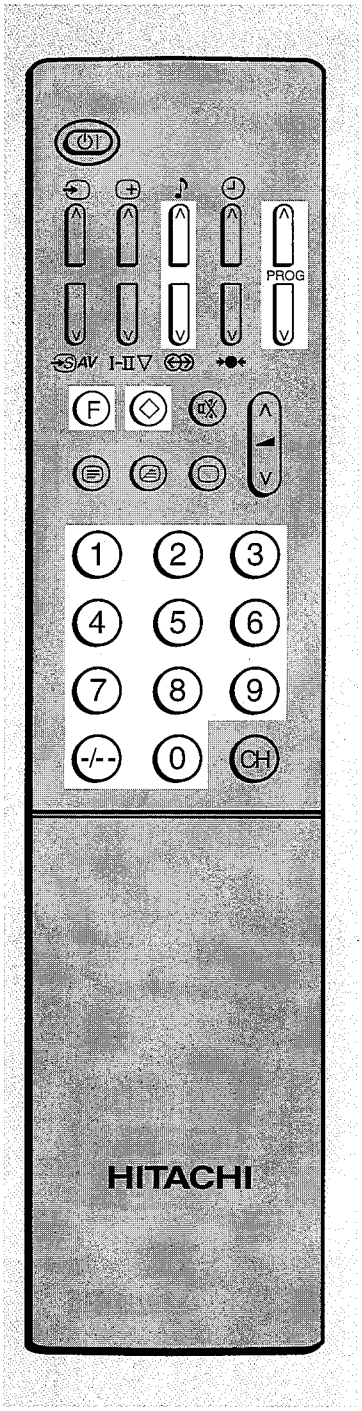


NOTE: To store a broadcast on a programme number from 10 - 59 at step 2, first press -/-- handset button. Two dashes will appear in display. Now enter the required two digit number using handset buttons 0 - 9.

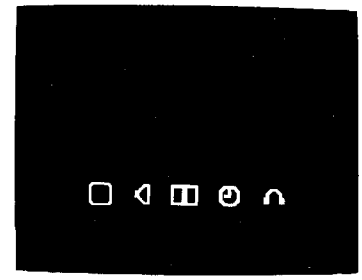
GUIDE The Quick Set Up Guide describes how to use "EASITUNE" to tune this T.V. to your VCR (refer also to your VCR operating guide), we recommend you press button 0 to store it on programme number 0, as indicated in the "EASITUNE" display.

Tuning in your T.V. (Conventional Method)

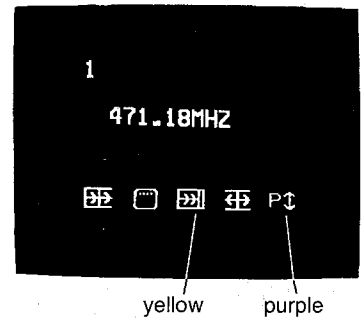
SEARCH TUNING



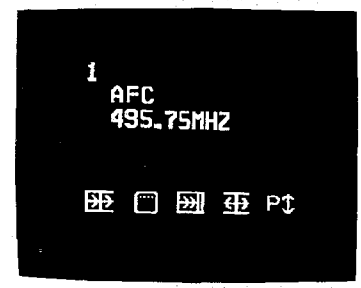
1. Press Ⓕ button on handset. The basic menu shown appears on the T.V. screen.



2. Press either yellow button to select tuning mode display.
3. Press one of the purple buttons, or buttons 0 - 9 to obtain the first desired programme number in the display (i.e. 1).



4. Press either yellow button to begin search tuning. When a broadcast is found the search tuning will stop.
5. If this broadcast is not the one required, repeat step 4 until desired broadcast appears, then press ◇ button to store.



6. Press one of the purple buttons, or buttons 0 - 9 to select the next desired programme number.
7. Repeat steps 4 - 6 until all broadcasts in your area have been tuned in and allocated programme numbers
8. Press Ⓕ button until menus disappear from T.V. screen.

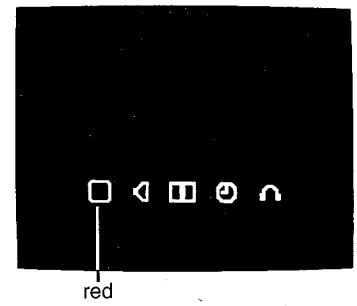
NOTE: To enter programme numbers above 9 (i.e. 10 - 59), press -/-- button at step 3 until two dashes replace the programme number in display. Then using butons 0 - 9, enter the the required programme number.

Note for engineers: If known, the channel or frequency of a broadcast can be entered directly on this T.V.
First select programme number, then press CH button to obtain either – – – • – – MHZ or CH – – on screen. (For channel input, AFC will be ON; for frequency input AFC will be OFF).
Enter frequency for MHZ display, or channel number for CH display. Press ◇ button to store once the broadcast appears.
Select next programme number and repeat procedure.
A third press of CH button displays S – – on screen. This is for cable channel entry (not available).
To clear these displays from the screen press ▢ button.

Picture and Basic Sound Settings

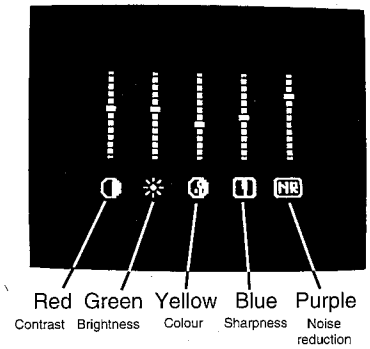
PICTURE

1. Press Ⓕ button to obtain the basic menu shown.



2. Press a red coloured button to obtain the picture adjustment display.

   The large block in each display represents the present level of each function.

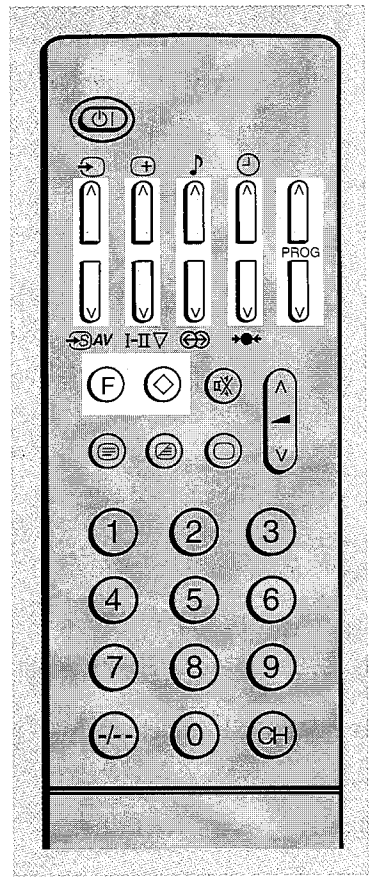


3. To adjust the level of each function, press the corresponding coloured handset button.
   The NR in this display represents Picture Noise Reduction. Press purple button to turn function ON or OFF. This function may improve the picture if reception is poor. The large block will be near the top of its scale when this function is ON, or near the bottom when OFF. Set for best overall picture.

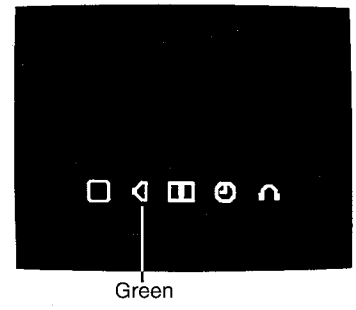
4. When picture levels are to your personal satisfaction, press ◇ button to store, then press Ⓕ button until all menus disappear from the screen.

   NOTE: If you temporarily change the picture levels (i.e. you do not press store button ◇), you can return to the normal memorised levels by pressing the ➔●➔ button.
   This can only be done once you have exit from the picture adjustment display.

SOUND

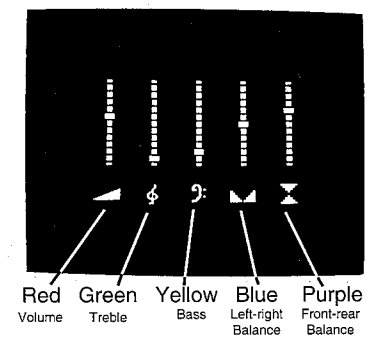


1. Press Ⓕ button to obtain the basic menu shown.



2. Press a green coloured button to obtain the audio adjustment display.

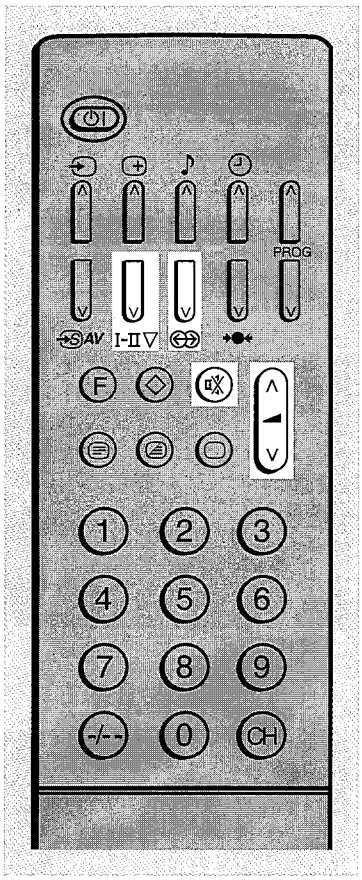
3. To adjust the level of each function, press the corresponding coloured handset button.



   NOTE ON BALANCE SYMBOLS:
   The two scales on the right hand side of the screen, (left to right speaker balance (◣◢) and front to rear speaker balance(⧗)) will not always be displayed. This depends on the effects chosen from the sound processing menu (described later).

4. When sound settings are adjusted to your satisfaction, press ◇ button to store, then Ⓕ button until menus disappear from screen.

Picture and Sound Settings



NOTE: There is a dedicated volume control and a sound mute button on the handset. These are marked ◢ and 🔇, and can be used without entering the menu system.

OTHER SOUND FACILITIES

STEREO-MONO BUTTON I-II-▽ (Lower green)
In areas receiving NICAM stereo, this button simply switches between mono (indicated on screen by ▽ symbol) and stereo (indicated by NICAM). If a dual language broadcast is available in the future, press this button to alternate between the main and second language. The CHI and CHII indicating lights on the front of T.V. will light accordingly.

SOUND EFFECTS PROCESSOR BUTTON ⊕⊕ (Lower yellow)
Used in conjunction with the stereo-mono button, this can be used to add special effects to both mono and NICAM stereo broadcasts. To try each effect, repeatedly press this button whilst in the mono or stereo modes. The table below describes each effect.

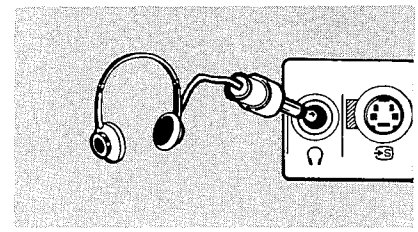
NOTE: If DOLBY Pro Logic Surround has been selected (see page 14), these buttons should not be pressed.

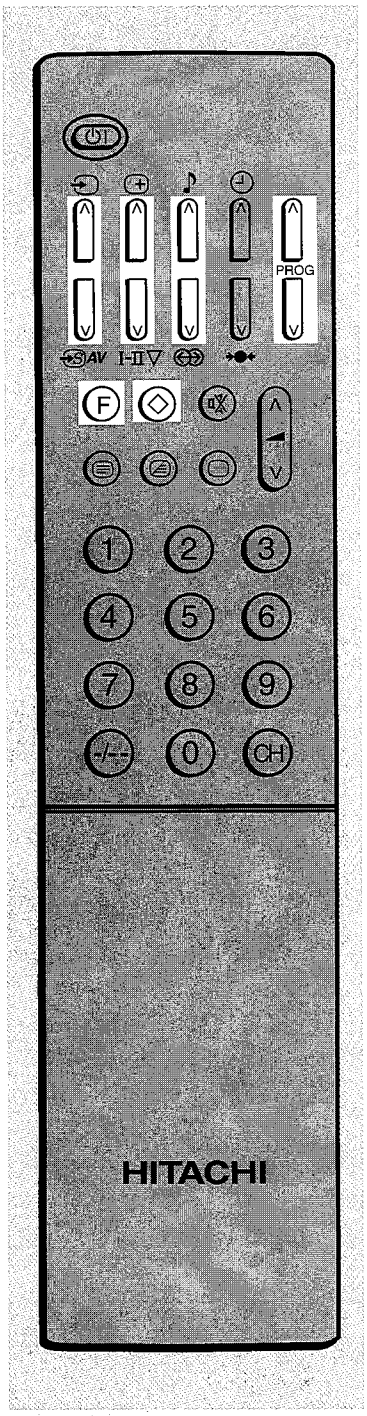
	ON SCREEN DISPLAY	⊙⊙ NICAM	← → NICAM	←⊙⊙→ NICAM
STEREO	EFFECT	TRUE STEREO	WIDE PSEUDO STEREO	WIDE STEREO (SPATIAL)
	ON SCREEN DISPLAY	⊙⊙ ▽	← → ▽	←⊙⊙→ ▽
MONO	EFFECT	TRUE MONO	WIDE PSEUDO STEREO	SPACE SOUND

Some effects are more noticable than others, and will vary depending on the programme. For example, NICAM wide stereo spatial (←⊙⊙→ NICAM) is particularly suitable for spectacular films or films not produced in Dolby Surround.

Picture and Sound Settings

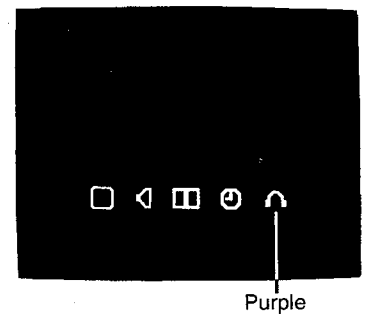
HEADPHONE SETTINGS





To set headphone outputs to suit personal taste, proceed as follows.

1. Push door on front of T.V., and connect headphones to socket marked ∩.

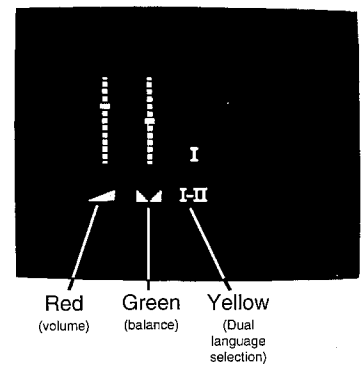


2. Press Ⓕ button to obtain the basic menu.

Purple

3. Press either purple button to select ∩ in the display.

   The menu shown appears.



4. Press TOP or BOTTOM red button to increase or decrease the volume to desired level.

5. Press TOP or BOTTOM green button to adjust the left and right speaker volume, to obtain the balance you require.

   Should a dual language broadcast be broadcast in the future, pressing a yellow coloured button will output each language to the headphones alternately. The **I** in display will change to **II** when second language is selected.

6. Press ◇ button to store, then press Ⓕ button until menus disappear from the T.V. screen.

Sound Processing Effects

The sound processing of this T.V. is capable of producing three effects in addition to normal stereo, to enhance the sound reproduction, thereby creating greater listening satisfaction.

1. **DOLBY PRO LOGIC SURROUND :** This improves on the normal two-channel stereo broadcasts, and recreates the sound as it was intended to be heard by film-makers. In addition to the left and right channels, there is a centre channel to ensure that the on-screen sounds, especially dialogue, always come from the centre of the screen as in the cinema. The internal speakers of the T.V. provide this centre channel. There is also a surround channel which enables the listener to become immersed in ambience and special effects.

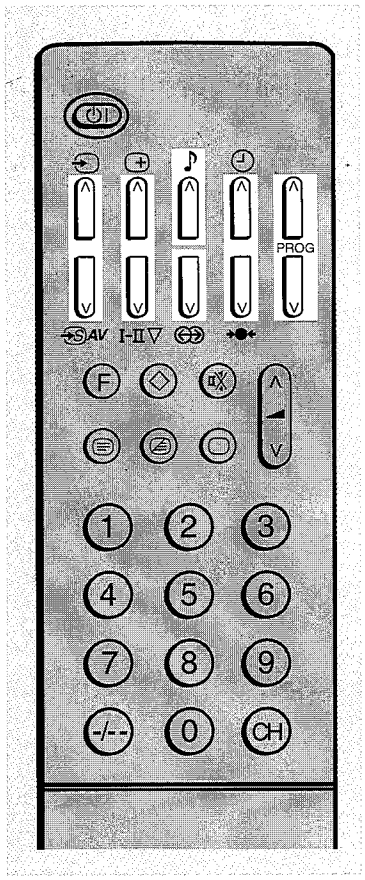
   A set-up menu is available, which enables you to adjust each individual channel, thereby creating the ideal sound balance to suit your environment.

   To experience the Dolby Pro Logic Surround effects to the full, you must connect external left and right speakers at the front, and two rear surround speakers, although alternative speaker set-ups are described later in case this is not possible (see page 16).

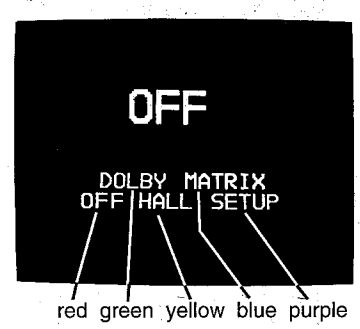
2. **HALL:** When this effect is chosen, it processes the sound signal to create a slight delay to the rear (surround) speakers. This gives the accoustic impression of listening to a broadcast in a hall. This effect may be desireable when listening to musical broadcasts etc., and operates in Mono or Stereo modes.

3. **MATRIX:** This processes the signal to create a psuedo surround sound effect. This only operates whilst receiving Stereo.

   To access the sound processor menu, proceed as follows.



1. Press the TOP yellow button ♪ . The display shown appears.



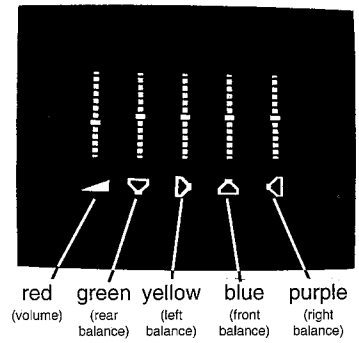
2. The five modes available for selection are coloured. The present mode is displayed in large white letters.

3. To select DOLBY, HALL or MATRIX modes, press the respective green, yellow or blue button.

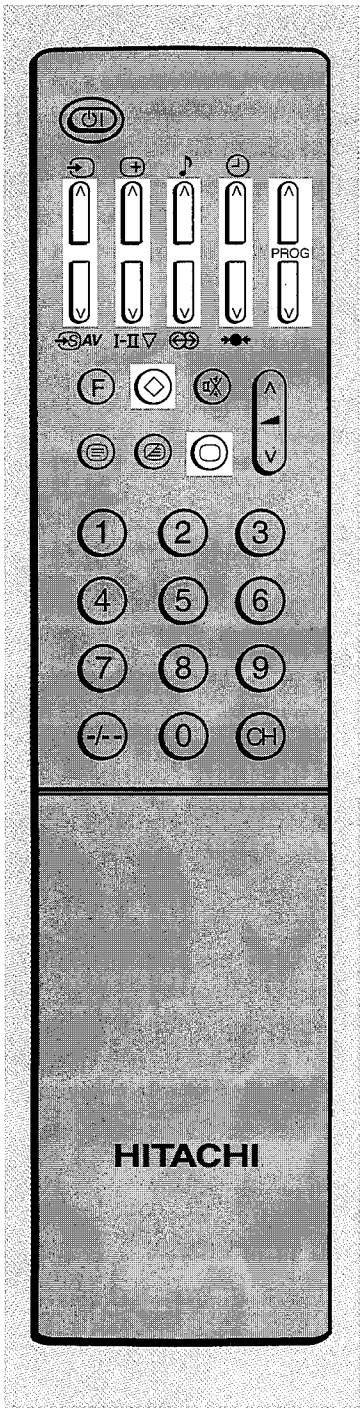
4. **OFF**
   If a red button is pressed, the OFF mode is selected. This turns off all the sound processor effects, returning the T.V. to its normal stereo sound operation.

5. **SET UP**
   When you press a purple button, the set-up menu for DOLBY is displayed.

   This consists of adjustment scales for the volume, plus the balance of the rear, left, centre and right sound channels.



Sound Processing Effects



When this menu is chosen, a cycle routine is initiated. This produces a noise which is output from the rear, left, centre and right channels in sequence. The symbols representing each channel in the display will turn white to coincide with this sequence. This process allows you to decide if the output from any channel requires adjustment to achieve the correct balance of sound. Adjust so all speaker volume levels match.

6. To select a channel for adjustment, press the corresponding TOP or BOTTOM coloured buttons on handset.

   The noise will then be output from that channel.

   Alter the level as required using the same coloured buttons.

   NOTE: Press TOP button to increase level, or BOTTOM button to decrease.

   Once adjustment is completed, the cycle routine continues.

   Press a red coloured button to increase or decrease the overall volume level as desired.

7. When satisfied with overall sound balance, press ◇ button to store.

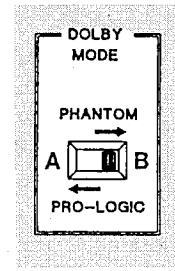
8. Press ▢ button to exit set-up menu.

GUIDE Once you exit the set-up menu, Dolby Pro Logic Surround is automatically selected, and will remain until one of the other effects is chosen.

Alternative Speaker Set-Ups

If you have not connected the front left and right speakers, it is possible to achieve a reasonable effect by the following methods:-

PHANTOM MODE



Set the DOLBY MODE switch at the rear of T.V. to "PHANTOM" position, and select "DOLBY" from the sound processing effects menu.

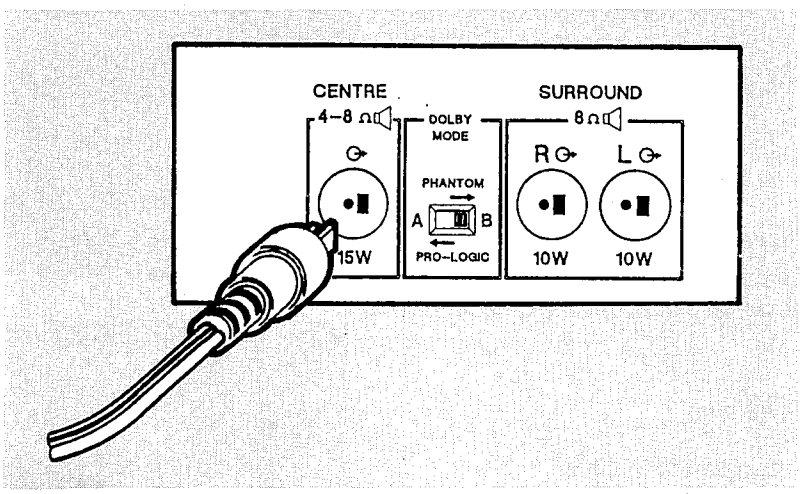
The internal speakers of the T.V. will then provide the left and right channels respectively, whilst a "Phantom" centre channel is created. The rear surround speakers must still be connected as normal.

DOLBY SURROUND PRO-LOGIC (Method B)

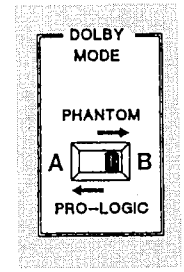
Set the DOLBY MODE switch to position B (as for Phantom mode), and select "DOLBY" from the sound processing effects menu.

The internal speakers of the T.V. will now provide the left and right channels.

What makes this different to "PHANTOM MODE", is the addition of a centre speaker (not supplied), which must be added and placed directly above or below the T.V. to achieve the full effect. This centre speaker must be 4–8Ω impedance with 15 Watts RMS power handling capability.



NICAM DIGITAL STEREO



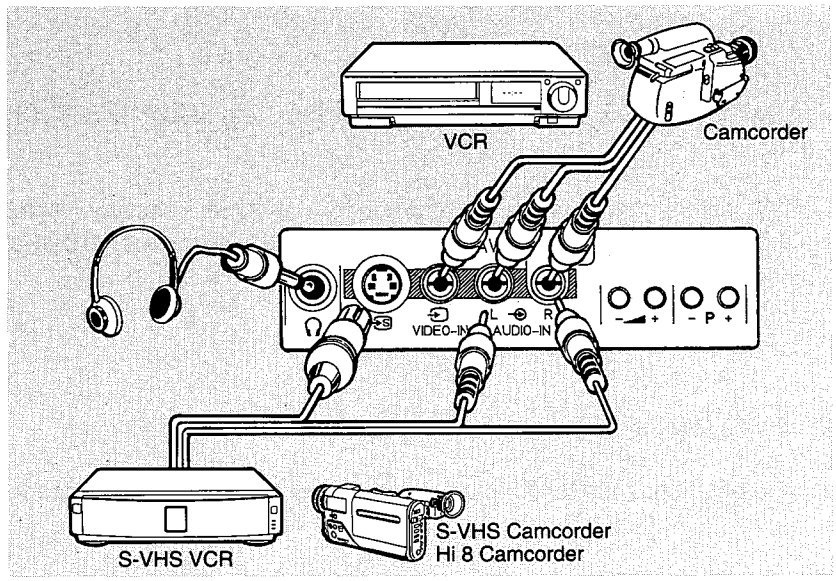
If you have not connected any of the speakers, in order to achieve stereo sound follow the method below.

Set DOLBY MODE switch to "PHANTOM" position (B) and select OFF from sound processing effects menu.

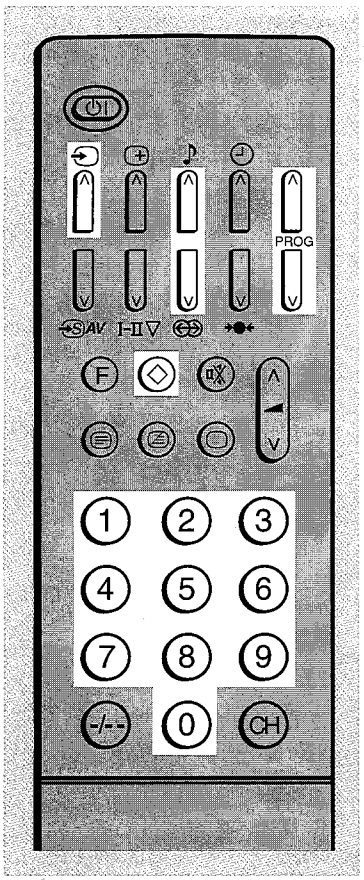
NOTE: For audio enthusiasts - It is possible to connect other speakers to the front and rear sockets, providing they are 8Ω impedance, and at least 10 Watts RMS. Similarly, a centre channel speaker socket is provided for an external speaker 4 - 8Ω, 15 Watts RMS. This would then replace the internal speakers of the T.V. Therefore, for best results it should be positioned directly below or above the T.V.

Connecting External Video/Audio Equipment

FRONT OF T.V. Push the door on the front of the T.V. to gain access to the sockets. As a convenient feature, most Video/Audio equipment can be connected temporarily to these sockets as shown below. This is most useful for camcorders etc.

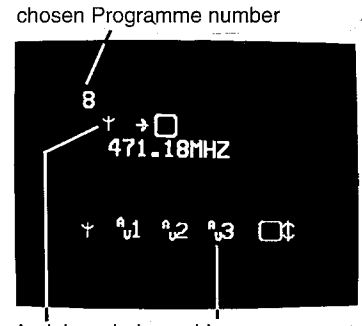


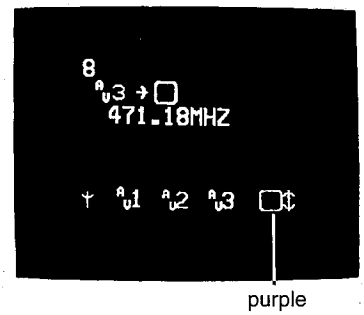
Should you connect an S-VHS VCR, or an S-VHS or Hi 8 camcorder as shown, the T.V. picture will disappear, and the camcorder or VCR signal can then take its place.
For other equipment connected to the phono sockets as shown above, follow this procedure:-



1. Use purple buttons, or buttons 0 - 9 to select a programme number not already assigned to a T.V. broadcast.
2. Press the TOP red button on handset to obtain the display shown.
3. Press a blue coloured button to select A_V3. This represents the phono socket inputs. A_V3 will replace the aerial symbol in the on screen display.
4. Press ◇ button to store.
5. Switch on external equipment to view.

   NOTE: Every time you require to view inputs fed via the phono sockets, remember to first select the programme number chosen in step 1.
6. Press a programme number tuned to a T.V. broadcast when you wish to return to normal viewing.



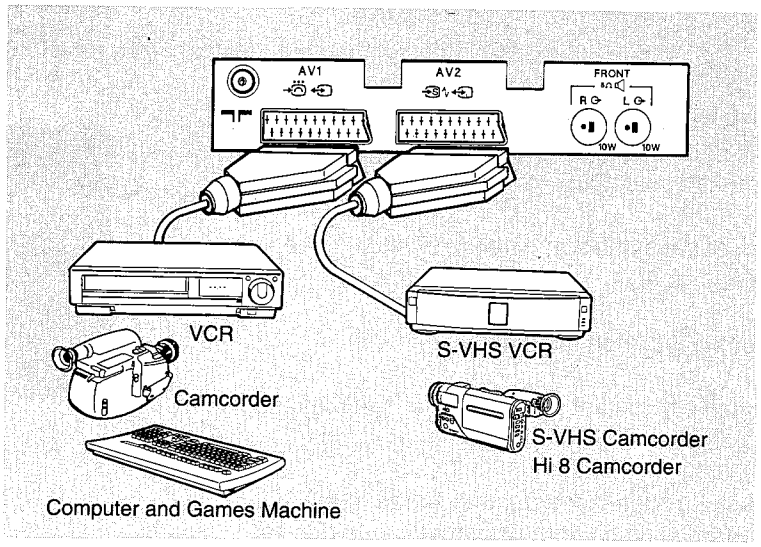


GUIDE If you have a VCR using PAL 60 format (525 lines) connected to the phono sockets, then press TOP purple button after selecting A_V3 in step 3. This alters the picture geometry temporarily to suit that format. Once a T.V. broadcast is re-selected the normal picture geometry settings are returned.

Connecting External Video/Audio Equipment

REAR OF T.V. Many VCRs rely on connection to the T.V.via the aerial socket, as shown on page 5 of this guide. However, most recent VCRs also have a scart socket to enable direct connection to one of the T.Vs. scart sockets.
Other equipment such as computers can also be connected to the T.V's. scart sockets as shown in drawing below.

If your VCR is a VHS type, and has an equivalent scart connector, then to replace the T.V. broadcast with the VCR signal, simply connect VCR and T.V. together using the scart connecting lead supplied, then press PLAY button on VCR. The on-screen display will indicate which of the scart sockets you have connected to, by temporarily displaying A_V1 or A_V2 on screen.



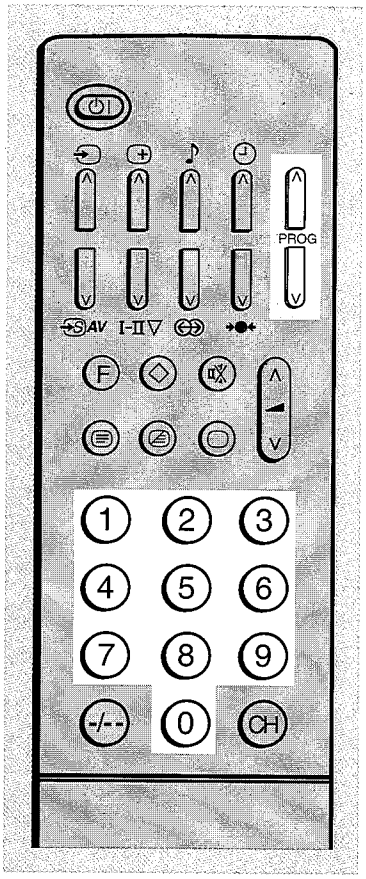
RGB INPUT

S-VHS Hi-8 INPUT

INPUT/ OUTPUT

SPEAKER (SOUND OUTPUT)

NOTE: Stereo VCRs must be connected to one of these scart sockets to assure stereo sound playback. Therefore, if your VCR or camcorder etc., has alternative connections for audio/video, obtain a suitably adapted lead from your dealer and proceed as follows.

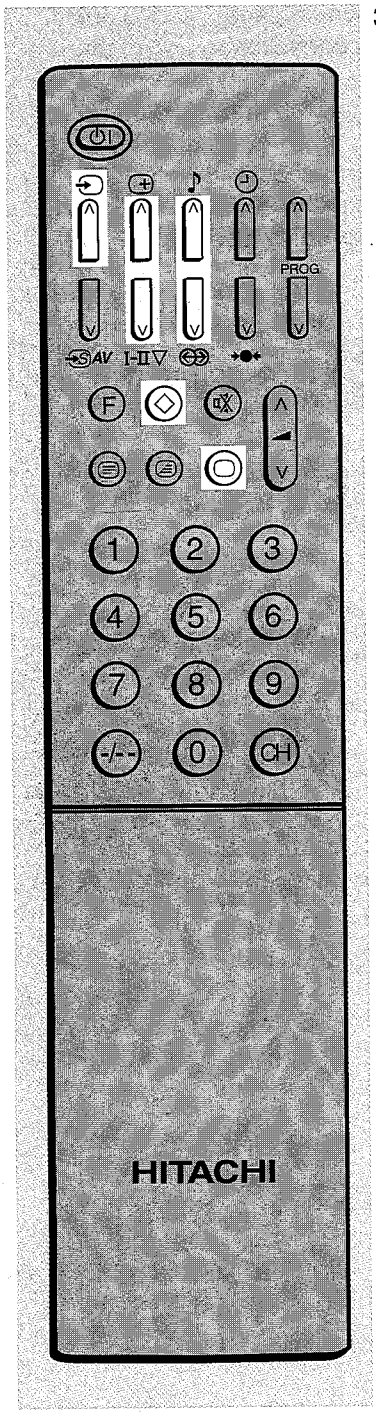


1. Use purple buttons or buttons 0 - 9 to select a programme number not already tuned to a T.V. broadcast.

2. Connect your equipment to one of the scart sockets of T.V.

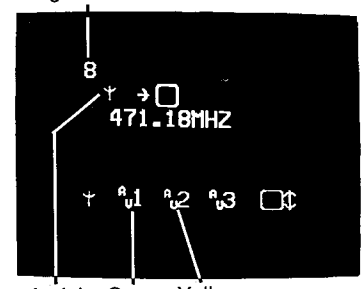
NOTE: If you also intend to connect a computer with an RGB output as well as a VCR to the scart sockets, then use AV1 scart for the computer, as this has a dedicated RGB facility (see page 20).

Connecting External Video/Audio Equipment



3. Press TOP red button to obtain the display shown.

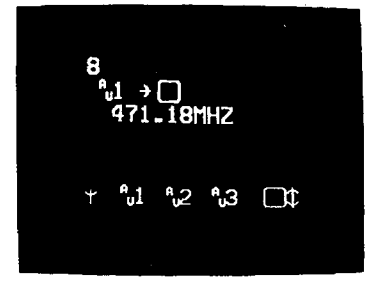
Programme number selected



Aerial symbol Green Yellow

4. Press a green or yellow coloured button to select A_V1 in display (for inputs to scart 1), or A_V2 (for inputs to scart 2).

   The aerial symbol in display will then be replaced by A_V1 or A_V2.



5. Press ◈ button to store.

6. Switch equipment on and press PLAY button if required.

7. Press a programme number tuned to a T.V. broadcast when you wish to return to normal viewing.

Every time you wish to view inputs from your external equipment, remember to first select the programme number chosen in step 1.

If you wish to connect a second VCR, or other external equipment to the remaining scart socket, select a new programme number, and repeat this procedure.

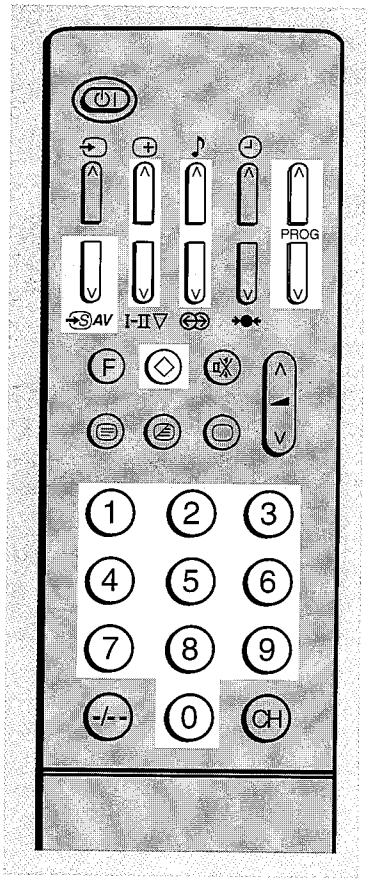
Don't forget to select this new programme number when playback is required from the second VCR.

GUIDE To leave this menu at any time, press ▢ button.

Connecting External Video/Audio Equipment

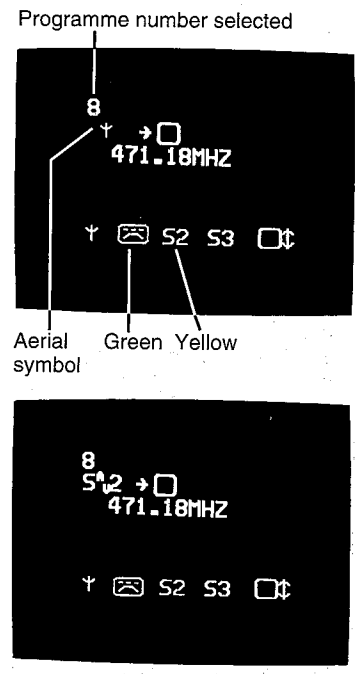
S-VHS VIDEO RECORDERS AND COMPUTERS

Once you have connected your equipment as shown in the drawing on page 18 , proceed as follows.



1. Ensure your equipment is connected to the correct socket, i.e. AV1 scart for computers or AV2 scart for S-VHS video recorders.
2. Use purple buttons or buttons 0 - 9 to select a programme number not already tuned to a T.V. broadcast.
3. Press BOTTOM red button to select external input display.
4. Press a green or yellow button to select (computer inputs to AV1 scart) or S2 (S-VHS inputs to AV2 scart).
   The aerial symbol in display will then be replaced by or S2.

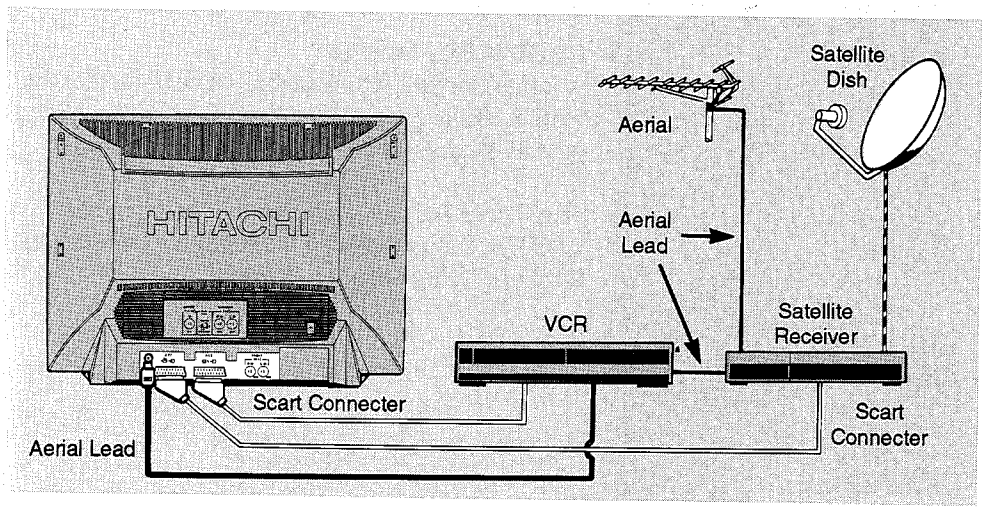
   NOTE: The S3 in the display represents the S-VHS socket on the front of this T.V.
   You need only select this should you desire to view inputs from that socket on a specific programme number every time.
5. Press ◈ button to store.
6. Switch on external equipment to view.
7. Press a programme number tuned to a T.V. broadcast when you wish to return to normal viewing.



Every time you wish to view inputs from your external equipment, remember to first select the programme number chosen in step 1.
If you wish to connect other external equipment to the remaining scart socket, select a new programme number, and repeat this procedure. Don't forget to select this new programme number when playback is required from additional equipment.

SATELLITE CONNECTION

Should you have a satellite receiver that you wish to connect to the T.V. for viewing, and to a VCR for recording, then we recommend you connect them to the scart sockets as shown. Using this method, you can still record satellite programmes whislt the T.V. is switched OFF. Please refer to your satellite and VCR operating guides, in conjunction with this operating guide.
NOTE: Don't forget to allocate a programme number and scart socket to each piece of equipment as previously described.



Teletext and Fastext Operation

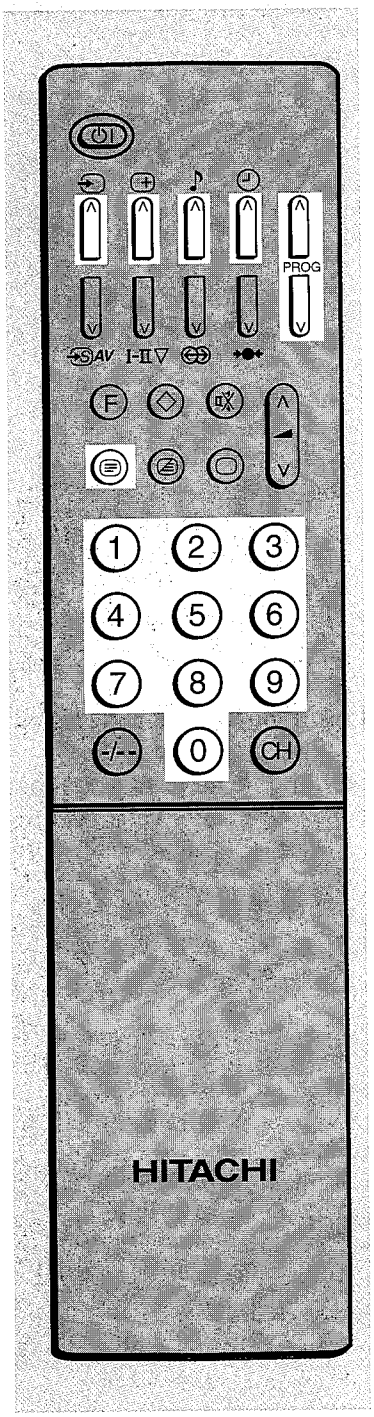
TELETEXT

To enter teletext mode press ⊜ (TEXT) button.

The very first time you select teletext, the index page will be displayed (normally page 100) unless a favourite page has been programmed. How to programme favourite pages is explained later.

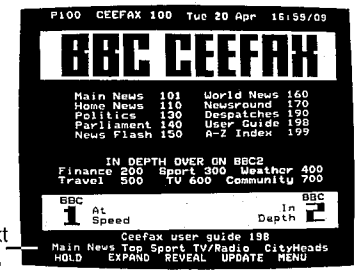
From the index page you can choose other pages by entering the 3 digit numbers shown alongside each topic. Use the handset buttons 0 - 9 to do this.

FASTEXT provides a quick method of viewing teletext pages containing related subjects, and by matching the coloured topics to the corresponding coloured handset buttons, is simple to use.



HOW TO USE FASTEXT:- Press teletext button ⊜ . At the top of the displayed page will be the page header. It consists of the teletext page number presently on display, plus the date and time.

At the bottom of the page should be the FASTEXT menu. This consists of 4 coloured topics transmitted by the broadcasting authorities as shown in example.


P100 CEEFAX 100 Tue 20 Apr 16:59/09
BBC CEEFAX
Main News 101 World News 160
Home News 110 Newsround 170
Politics 130 Despatches 190
Parliament 140 User Guide 198
News Flash 150 A-Z Index 199
IN DEPTH OVER ON BBC2
Finance 200 Sport 300 Weather 400
Travel 500 TV 600 Community 700
BBC 1 At Speed
In Depth BBC 2
Ceefax user guide 198
Main News Top Sport TV/Radio CityHeads
HOLD EXPAND REVEAL UPDATE MENU
Fastext Topics

Should any other menu be displayed, press the BOTTOM purple coloured button (i.e. to select MENU) until FASTEXT menu appears.

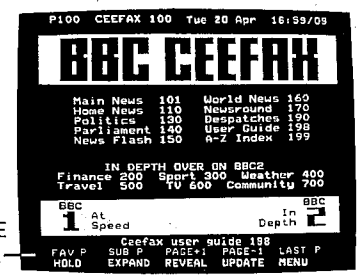
To select one of the FASTEXT topics for viewing, press the corresponding coloured button from TOP row of handset.

Once that page is displayed, 4 new topics appear. You can keep selecting from these for as long as desired.

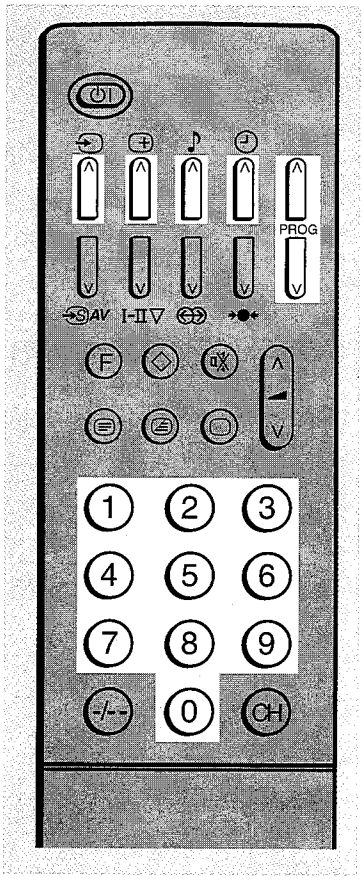
If you do not wish to view the displayed topics, enter your own 3 digit page number using buttons 0 - 9. If you make an error entering a page number, complete the 3 digit number, then re-enter.

PAGE MENU MODE:
Another useful feature of this teletext system is the PAGE MENU, which shows a number of ways to quickly access or store pages.

The PAGE MENU is an alternative mode to FASTEXT, so first exit FASTEXT by pressing the BOTTOM purple button.


P100 CEEFAX 100 Tue 20 Apr 16:59/09
BBC CEEFAX
Main News 101 World News 160
Home News 110 Newsround 170
Politics 130 Despatches 190
Parliament 140 User Guide 198
News Flash 150 A-Z Index 199
IN DEPTH OVER ON BBC2
Finance 200 Sport 300 Weather 400
Travel 500 TV 600 Community 700
BBC 1 At Speed
In Depth BBC 2
Ceefax user guide 198
FAV P SUB P PAGE+1 PAGE-1 LAST P
HOLD EXPAND REVEAL UPDATE MENU
PAGE menu

Teletext and Fastext Operation



FAV P represents FAVOURITE PAGE mode.

This allows you to enter up to 5 pages you use most often, and are therefore known as favourite pages.

This can only be done on programme numbers 1 - 9 as follows.

METHOD:- Press the TOP red button to obtain the FAVOURITE PAGE menu.

The first number in the display will be coloured white. If a number has not been entered into a coloured position, 3 dashes will appear in its place.

NOTE: The first page number in the menu will always be searched for and displayed when this mode is first selected, as shown in the diagram.

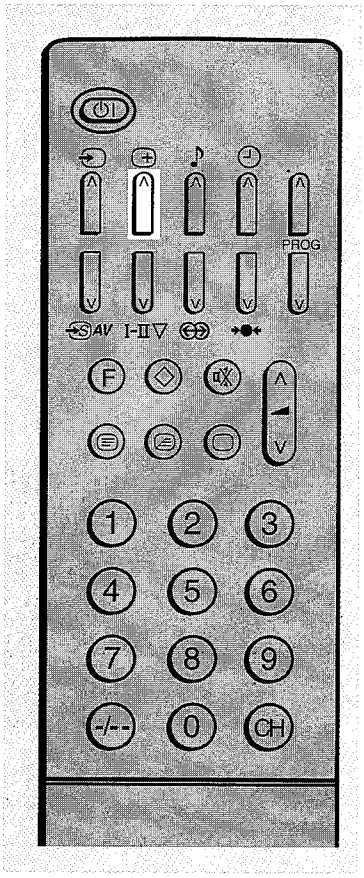
Favourite Page menu

To enter a new favourite page number: First press the coloured button from the TOP row of handset, which corresponds to the number you wish to change, or the coloured dashes .

Enter new 3 digit number using buttons 0 - 9.

Once that page appears, it is stored in the memory.

Repeat procedure until all 5 coloured positions have been allocated page numbers.



To view a favourite page number: Simply press the corresponding coloured button from the TOP row of the handset.

That number will then turn white.

To return to PAGE menu press BOTTOM purple button.

PAGE menu

SUB P represents sub-page mode.

If you access a teletext page number consisting of several sub-pages, they will be displayed in sequence. To view these at your leisure proceed as follows.

Press TOP green button.

sub-page menu

Sub-page menu appears as shown.

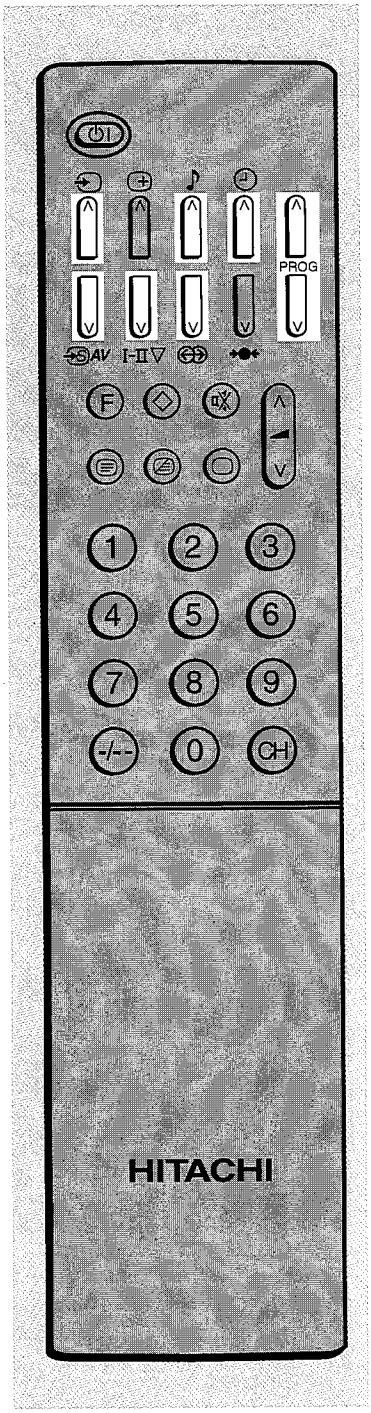
Enter new page number if required.

The page number and sub-page number presently on view will be shown in the display (i.e. sub-page 4 of page 199).

If no sub-pages exist for that page number, 3 zeros will appear in place of the sub-page number.

Page and sub-page number

Teletext and Fastext Operation



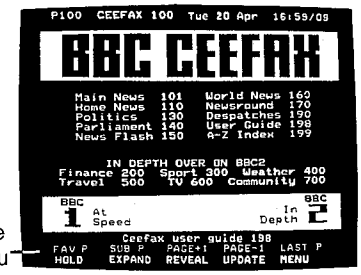
Pressing the TOP purple button selects → in display.

This increases the sub-page number by one.

Pressing the TOP red button selects ← in display.

This decreases the sub-page number by one.

To return to PAGE menu, press BOTTOM purple button (i.e. MENU in display).

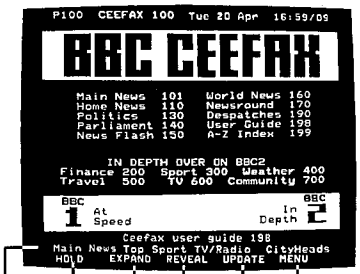

P100 CEEFAX 100 Tue 20 Apr 16:59/09
BBC CEEFAX
Main News 101 World News 160
Home News 110 Newsround 170
Politics 130 Despatches 190
Parliament 140 User Guide 198
News Flash 150 A-Z Index 199
IN DEPTH OVER ON BBC2
Finance 200 Sport 300 Weather 400
Travel 500 TV 600 Community 700
BBC 1 At Speed
In Depth BBC 2
Ceefax user guide 198
FAV P SUB P PAGE+1 PAGE-1 LAST P
HOLD EXPAND REVEAL UPDATE MENU
Page Menu

PAGE +1; PAGE -1. To view the next numerical page, or previous numerical page from the page on display, press either the TOP yellow or TOP blue coloured buttons.

LAST PAGE (LAST P) When a page is on display, you can return to the previously viewed page, by pressing the TOP purple button. (LAST P)

To return to FASTEXT menu, press the BOTTOM purple button. (MENU)

All the menus in this teletext system contain the following fixed features, which are colour coded to match the bottom row of coloured handset buttons.


P100 CEEFAX 100 Tue 20 Apr 16:59/09
BBC CEEFAX
Main News 101 World News 160
Home News 110 Newsround 170
Politics 130 Despatches 190
Parliament 140 User Guide 198
News Flash 150 A-Z Index 199
IN DEPTH OVER ON BBC2
Finance 200 Sport 300 Weather 400
Travel 500 TV 600 Community 700
BBC 1 At Speed
In Depth BBC 2
Ceefax user guide 198
Main News Top Sport TV/Radio CityHeads
HOLD EXPAND REVEAL UPDATE MENU
FASTEXT Topics

Fixed Features

HOLD Pressing the BOTTOM red button will prevent the page on display from changing, should it contain sub-pages.

The word HOLD replaces the page number at the top of the screen.

Press BOTTOM red button again to release hold condition.

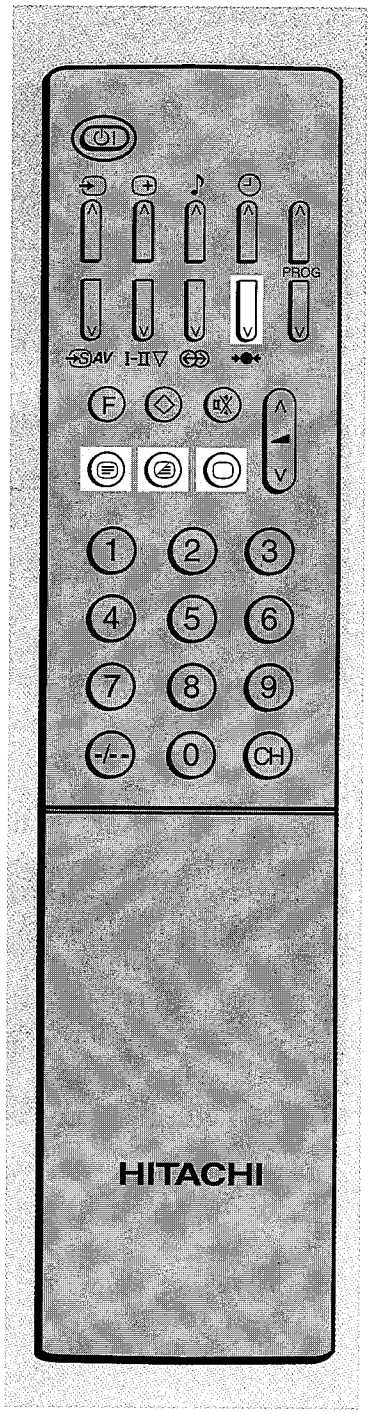
EXPAND Press the BOTTOM green button to expand the top half of displayed page.

Press again to expand the bottom half, and once more to return to original size.

REVEAL Certain teletext pages contain hidden information, i.e. quiz pages.

To reveal this information press the BOTTOM yellow button. Press again to cancel.

Teletext and Fastext Operation



UPDATE Should a teletext page contain more than one page (i.e. sub-pages), you can return to the T.V. picture whilst waiting for the page to change.

Press BOTTOM blue button to select UPDATE.

The T.V. picture returns, but the teletext header will remain for a short time.

Once page is updated, the teletext header and the menu at the bottom of the screen will re-appear.

Press BOTTOM blue button again.

Updated page is displayed.

OTHER HANDSET BUTTONS

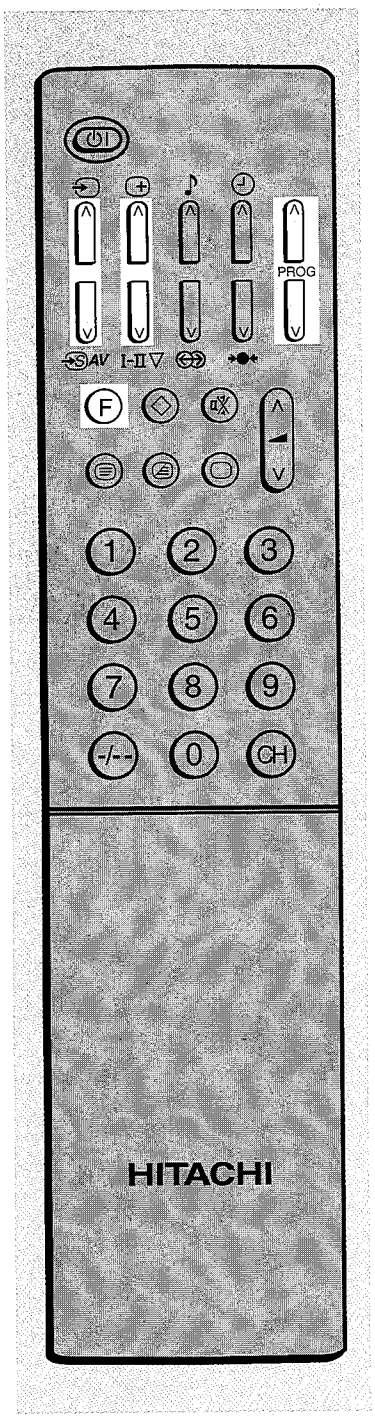
To view the T.V. picture whilst in teletext mode, press the ⊜ button.

Press ⊜ button to return to normal teletext.

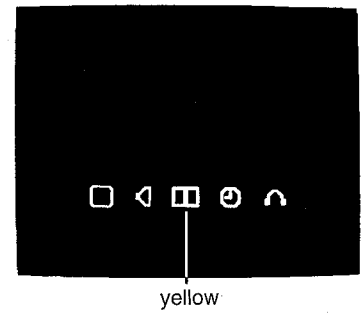
To return to normal T.V. operation from any teletext mode, press the ▢ button.

Programme Name

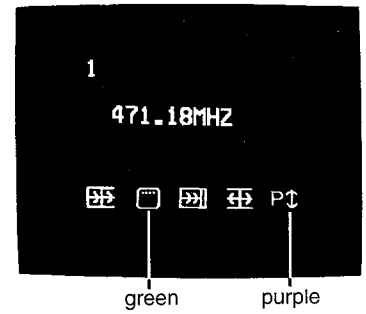
Each programme number can also be given a name if desired. This can be up to 5 letters or characters long. Once entered and stored it will appear alongside the programme number in the on-screen display.



1. Press Ⓕ button to obtain the menu shown.



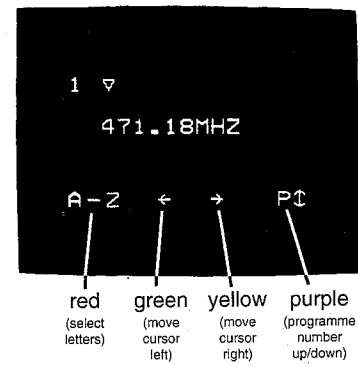
2. Press a yellow coloured button. The display shown appears.



3. Press a purple button to select the first programme number to be named, unless it is the one already displayed.

4. Press a green coloured button. The programme name display appears on screen, and includes a flashing triangle (cursor).

   If that programme number has already been given a name, that will appear alongside the programme number, with the first letter flashing.

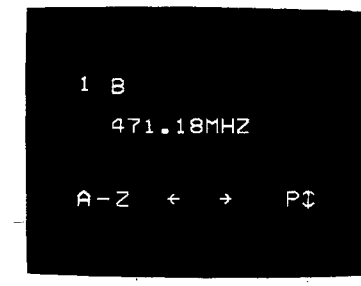


NOTE: In order to add the programme name, the letters and numbers are chosen by pressing the TOP red button.

The cursor is then replaced by progressively advancing numbers and then letters.

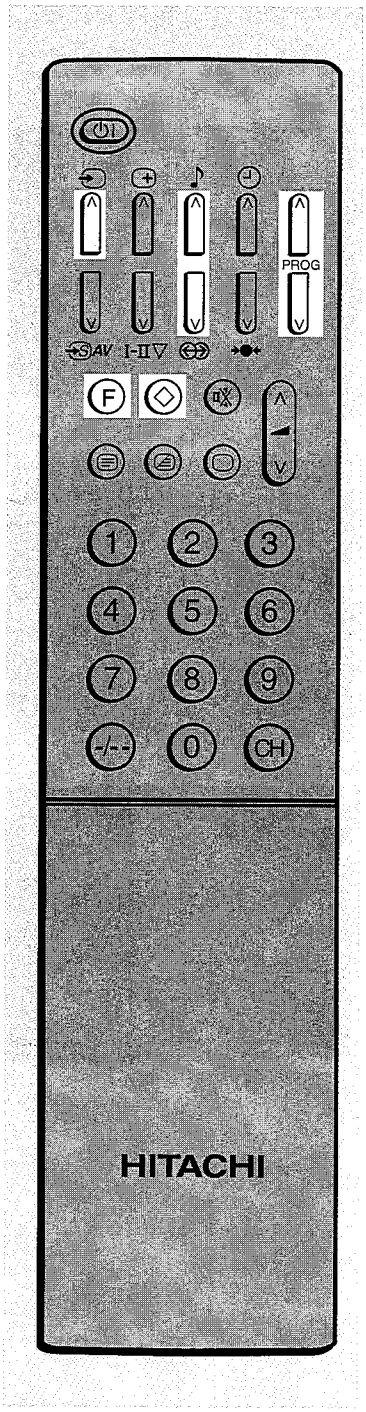
To select one of these, release the button when it appears in display; if you pass the letter or number required, press the BOTTOM red button to reverse the sequence.

The following example details how to name programme number 1 as BBC 1.



5. Press TOP red button until letter B replaces the cursor (flashing triangle).

Programme Name



6. Press either yellow button. Cursor re-appears to the right of letter B.

7. Press TOP red button to obtain the second B in display.

8. Press either yellow button. Cursor will re-appear to the right of second B.

9. Press TOP red button to obtain C in display.

10. Press yellow button. Cursor re-appears.

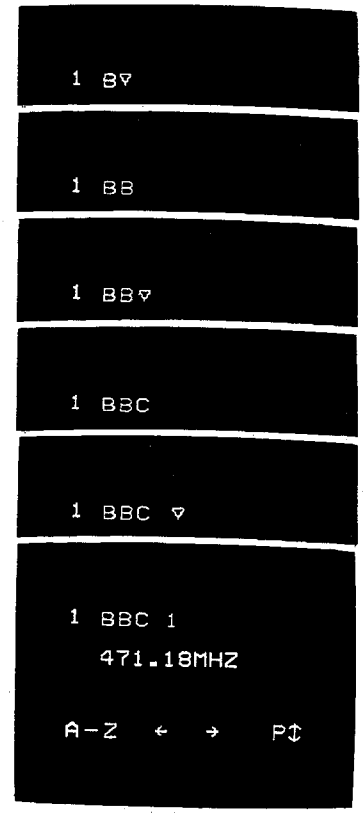
    To create a blank space, press yellow button again.

11. Press TOP red button until number 1 appears in display.

12. Press button ◈ to store. Part of display turns red briefly.

13. Press a purple button to obtain the next programme number you wish to name, and repeat procedure.

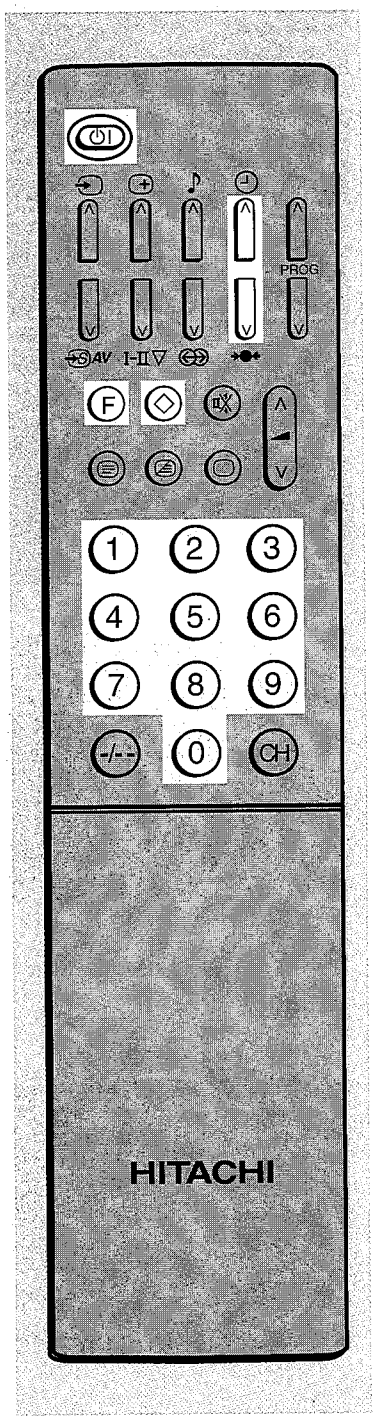
14. Press Ⓕ button until all menus disappear from T.V. screen.



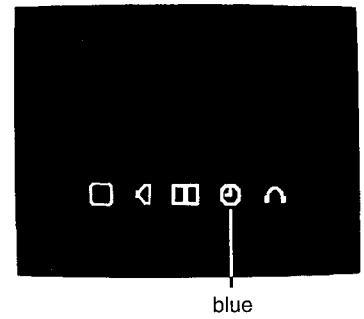
Timer Operations

ON TIMER This function enables you to programme the T.V. to return to normal operation (switch ON) from standby mode at a pre-determined time.

NOTE: In standby mode, all major functions of the T.V. will be off.

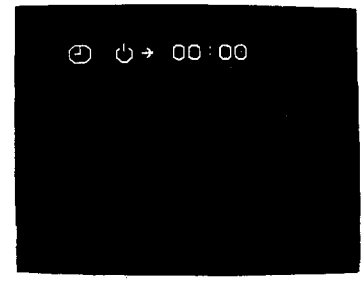


1. Press Ⓕ button to obtain menu shown.



2. Press a blue coloured button to obtain the ON timer display.

   The first 0 in display will be flashing.



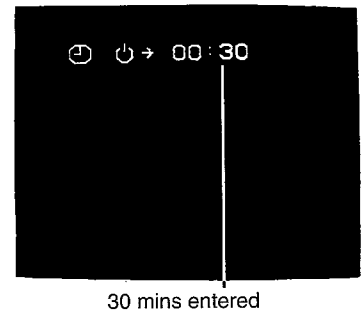
3. Decide the amount of time you wish the T.V. to remain OFF (in standby).

   This can be from 1 minute to a maximum of 23 Hrs 59 Mins.

   Enter the desired time by using buttons 0 - 9.

   When entering times of less than one hour, enter two zeros first; i.e. for 30 minutes press 0, 0, 3, then 0.

   Should you make an error, complete the entry, then re-enter correct time.



4. Press ◇ button to store.

5. Press ⏻I button once. Picture and sound disappear.

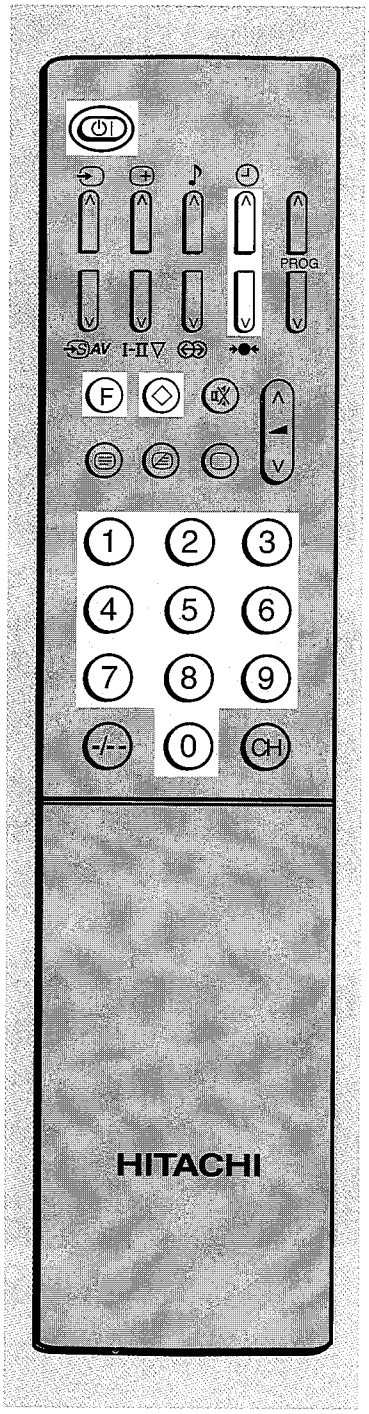
   The red indicating light on the front of the T.V. will turn on, indicating the standby mode exists.

   When the time entered has elapsed, the T.V. will return to normal operation

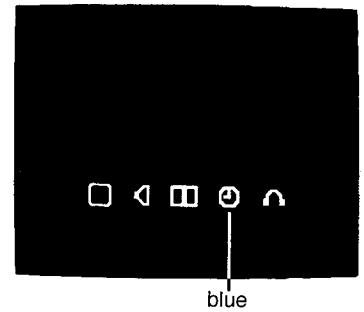
NOTE: If no button is pressed within 3 minutes of normal operation resuming, the T.V. will return to standby mode as a safety precaution.

Timer Operations

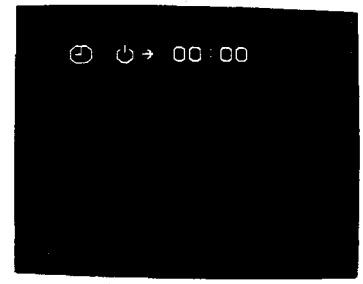
OFF TIMER Use this facility to programme your T.V. to go "OFF" (into standby), at a pre-determined time.



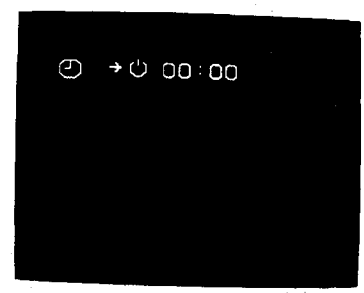
1. Press Ⓕ button to obtain menu shown.



2. Press a blue coloured button to obtain the ON timer display.

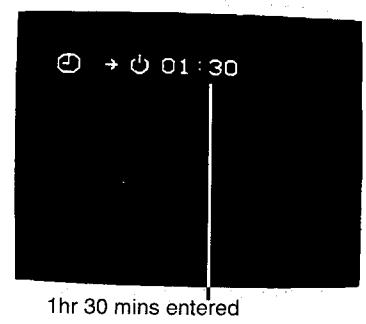


3. Press TOP blue coloured button to obtain the OFF timer display. The first 0 in display will be flashing.



4. Decide the amount of time to elapse before T.V. goes OFF. This can be from 1 minute to a maximum of 23 Hrs 59 Mins.

5. Enter the desired amount of time using buttons 0 - 9, i.e. 1 Hr 30 mins for example.



6. Press ◇ button to store.

7. When entered time has elapsed, the T.V. will go into standby mode.

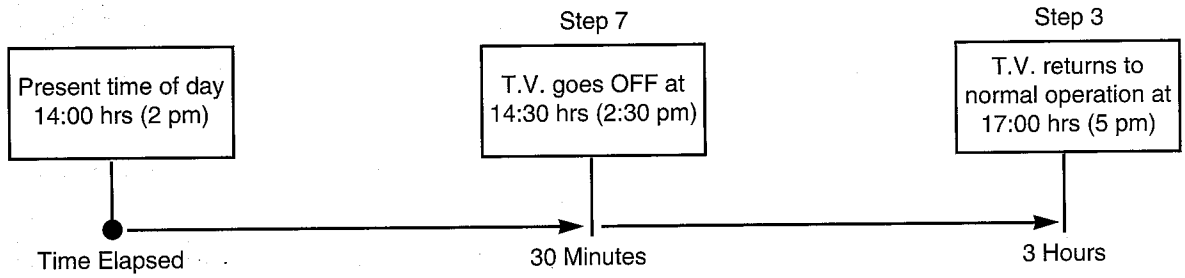
8. Press ⏻I button once to return to normal operation.

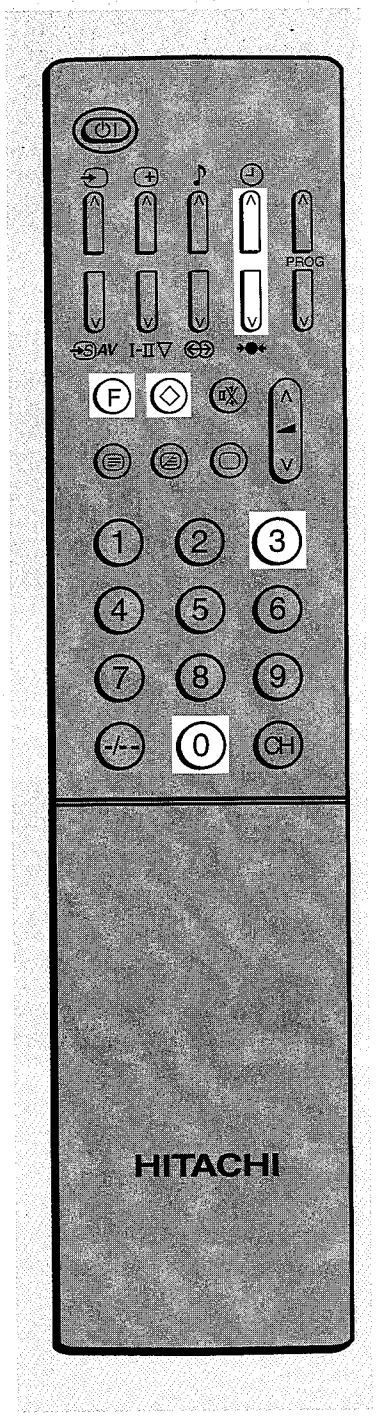
Timer Operations

TO COMBINE ON AND OFF TIMER

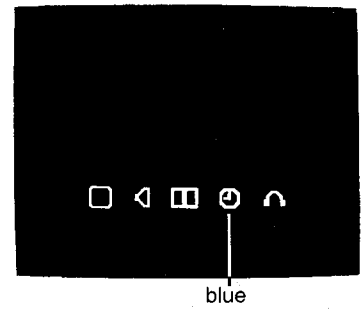
It is possible to combine the ON and OFF operations to programme the T.V. to turn "OFF", (into standby) then return to normal operation at a pre-determined time.

N.B. When entering the timer settings for this combined operation, it is important that they be calculated from whatever the present time is. The following diagram shows how this relates to steps 3 and 7 in the procedure.

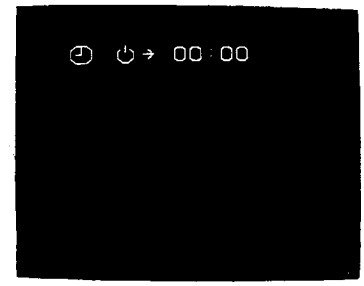




1. Press Ⓕ button to obtain menu shown.



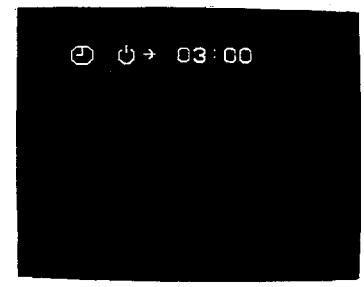
2. Press a blue coloured button. ON timer display appears.



3. Calculate the time to elapse before T.V. comes back ON from standby mode.

   This must be done from the present time of day.

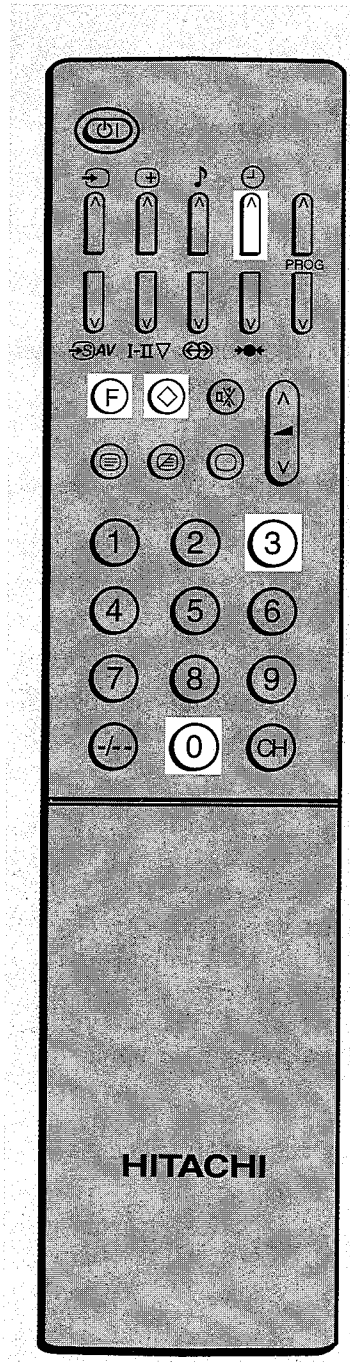
   As an example, if it is now 14:00 hrs (2pm), and you wish the T.V. to return to normal operation at 17:00 hrs (5pm), then the total time = 3 hrs.



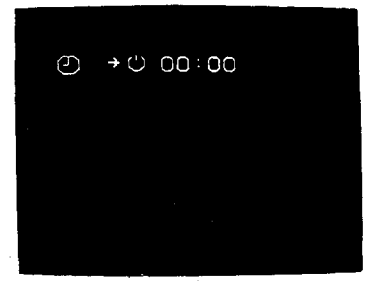
4. Enter 0, 3, 0, and 0 using handset buttons.

5. Press ◇ button to store.

Timer Operations



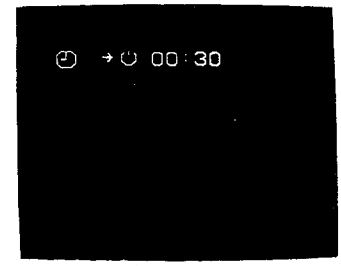
6. Press TOP blue button. OFF timer display appears on screen.



7. Using the same starting point, i.e. 14:00 hrs (2pm), calculate the amount of time before OFF (standby) is required.

   For the T.V. to go off at 14:30 hrs (2:30 pm) for example, this will be 30 minutes.

   Enter 0, 0, 3, and 0 using handset buttons.



8. Press ◈ button to store.

9. Press Ⓕ button until all menus disappear from the screen.

   The T.V. will then go off at 14:30 hrs (2:30pm), and return to normal operation at 17:00 hrs (5pm).

Do's and Dont's

SOME DO'S AND DON'TS ON THE SAFE USE OF EQUIPMENT

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

✦✦✦✦✦✦✦✦

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

✦✦✦✦✦✦✦✦

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way - switch off, withdraw the mains plug and consult your dealer.

DON'T place water filled vessels on top of T.V. cabinets.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and NEVER fix legs with wood screws - to ensure complete safety always fix the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

- NEVER let anyone especially children push anything into holes, slots or any other opening in the case - this could result in a fatal electric shock;

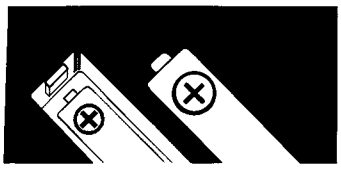
- NEVER guess or take chances with electrical equipment of any kind - it is better to be safe than sorry!

✦✦✦✦✦✦✦✦

Battery Safety Guidelines

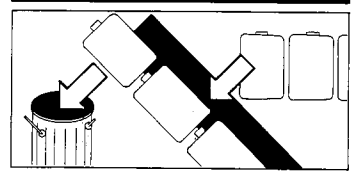
Used correctly, domestic batteries are a safe and dependable source of portable power. Problems can occur if they are misused or abused - resulting in leakage or, in extreme cases, fire or explosion. Here are some simple guidelines to safe battery use designed to eliminate any such problems.

ALWAYS



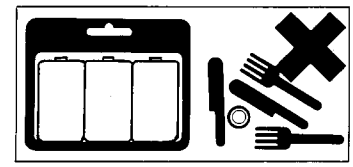
Take care to fit your batteries correctly, observing the plus + and minus - marks on the battery and applicance. Incorrect fitting can cause leakage or, in extreme cases, fire or explosion.

ALWAYS



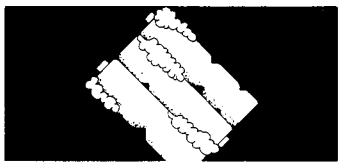
Replace the whole set of batteries at one time, taking care not to mix old and new batteries of different types, since this can result in leakage or, in extreme cases, fire or even an explosion.

ALWAYS



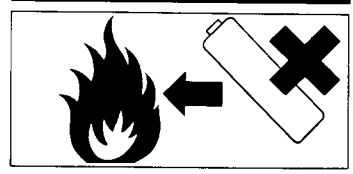
Store unused batteries in their packaging and away from metal objects which may cause a short circuit resulting in leakage or, in extreme cases, fire or even an explosion.

ALWAYS



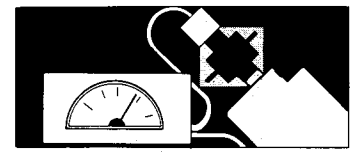
Remove dead batteries from equipment and all batteries from equipment you know you are not going to use for a long period of time. Otherwise the batteries may leak and cause damage.

NEVER



Never dispose of batteries in fire as this can cause them to explode. Please put dead batteries in with the normal household waste.

NEVER



Never attempt to recharge ordinary batteries, either in a charger or by applying heat to them. They may leak, cause fire or even explode. There are special rechargeable batteries which are clearly marked as such.

SOME USEFUL HINTS ON EQUIPMENT CARE

1. Avoid places where dust is a problem, and do not place your receiver near radiators or other heat sources, as overheating could lead to faulty performance. Also, try to place your receiver where no light (artificial or sunlight) shines on the screen as this affects picture quality and could prevent the receiver from responding to commands from the remote control handset.

2. Keep all magnetic material away from the face of the TV tube, as magnetic fields may cause undesirable effects on the picture.

3. Never use thinners or chemical solvents to clean your cabinet.

4. Occasionally, you may receive a mild electric shock from the picture tube. This is only the same type of static electricity you sometimes experience when taking off items of clothing.

5. Avoid knocking or dropping the remote control unit to the floor, as this could damage precision parts assembled in this unit.

6. When batteries are exhausted, the remote control unit does not work, or the operation becomes unstable - replace the old batteries.

7. When TV games, home computers etc. are used in conjunction with the receiver, avoid using excessive contrast and brightness, as this may damage the phosphor coating of the picture tube.

Problem Guide

Most problems can be solved by checking a few basic procedures.
Please try the following before calling your dealer.

NO PICTURE OR SOUND FROM SWITCH ON

1. If the red indicating light is on, then the T.V. could be in standby. Press the ⏻I button on handset once and the T.V. should begin to operate normally.
There will be a slight delay as the T.V. becomes operational, so take care not to press the ⏻I button again, or the standby condition will be returned.

2. If the red indicating light is not on, then the T.V. may have been previously switched off whilst in one of the stored AV input or output modes. If this has happened, pressing a programme number known to be tuned to a T.V. broadcast will return normal operation.

3. If there is no signal then perhaps you forgot to store the T.V. broadcast after tuning in.
Follow tuning in procedure to re-tune required signal, then ensure you press the ◈ (store) button.

INTERNAL SPEAKERS OF T.V. NOT WORKING AFTER "DOLBY" SELECTED IN SOUND PROCESSOR MENU (with left and right external speakers connected)

Check that the DOLBY mode switch at the rear of T.V. is set to Pro-logic position.

TO EXIT MENUS QUICKLY

Should you enter any menu by accident, and you are not sure of the exit procedures, pressing the handset button ▢ will return you to normal T.V. operation immediately.
This also applies to teletext menus and DIRECT tuning displays.

If you accidently enter a display which is an equipment input menu, and then press ◈ (store) button, the sound and picture will disappear, leaving only a menu on screen.
In this case, simply select the aerial symbol Y from the display using a red button, and restore with ◈ button. Then press button ▢ to return to normal T.V. operation.

NOISY PICTURE (Snow effect)

Please carefully check the aerial connection to the T.V.

HANDSET DOES NOT WORK

1. Change batteries.

2. Ensure that the infra red receiving lens is not obstructed in any way.

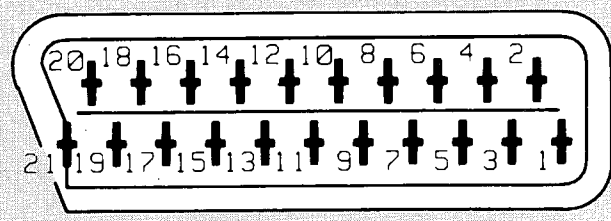
NO DOLBY SURROUND SOUND WHEN PLAYING BACK VCR TAPES

1. Mono recorded VCR tapes will not produce Dolby surround.
2. Check that your VCR is capable of Stereo playback.
3. Ensure your VCR is set to its Stereo playback mode (Refer to your Operating Guide).
4. Your VCR must be connected to your T.V. via the scart lead supplied, or an appropriate AV lead. (Refer to the section explaining external equipment connection on pages 17 - 20 of this Operating Guide).

Specifications

TV standard		625 line single standard
Channel coverage		UHF Channels 21 - 68
Programme selectors		Programme UP/DOWN buttons with 59 programme remote control
Aerial impedance		75 Ohm unbalanced
Picture tubes		59cm and 66cm type
Battery type		2 x 1.5v (AAA type)
Power consumption		C2574TN. 90W C2874TN. 96W
Mains voltage		240v AC 50Hz
Weight including all accessories	C2574TN models	40.75 Kgs
	C2874TN models	48 Kgs
Dimensions	C2574TN models (W x H x D)	701 x 520 x 464mm
	C2874TN models	772 x 576 x 500mm

SCART CONNECTING SOCKETS



PIN No.	FUNCTION	PIN No.	FUNCTION
1	AUDIO OUT (RIGHT)	11	GREEN VIDEO INPUT (AV1)
2	AUDIO INPUT (RIGHT)	12	NOT USED
3	AUDIO OUT (LEFT)	13	GROUND
4	GROUND (AUDIO)	14	NOT USED AV2 (GROUND AV1)
5	GROUND	15	RED VIDEO INPUT AV1 CHROMINANCE INPUT AV2
6	AUDIO INPUT (LEFT)		
7	BLUE VIDEO INPUT (AV1)	16	STATUS (BLANKING)INPUT
8	SWITCHING INPUT	17	GROUND (VIDEO)
9	GROUND	18	GROUND
10	NOT USED	19	COMPOSITE VIDEO OUTPUT
		20	COMPOSITE VIDEO INPUT AV1 COMPOSITE LUMINANCE/ COMPOSITE VIDEO AV2
		21	GROUND

HITACHI

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